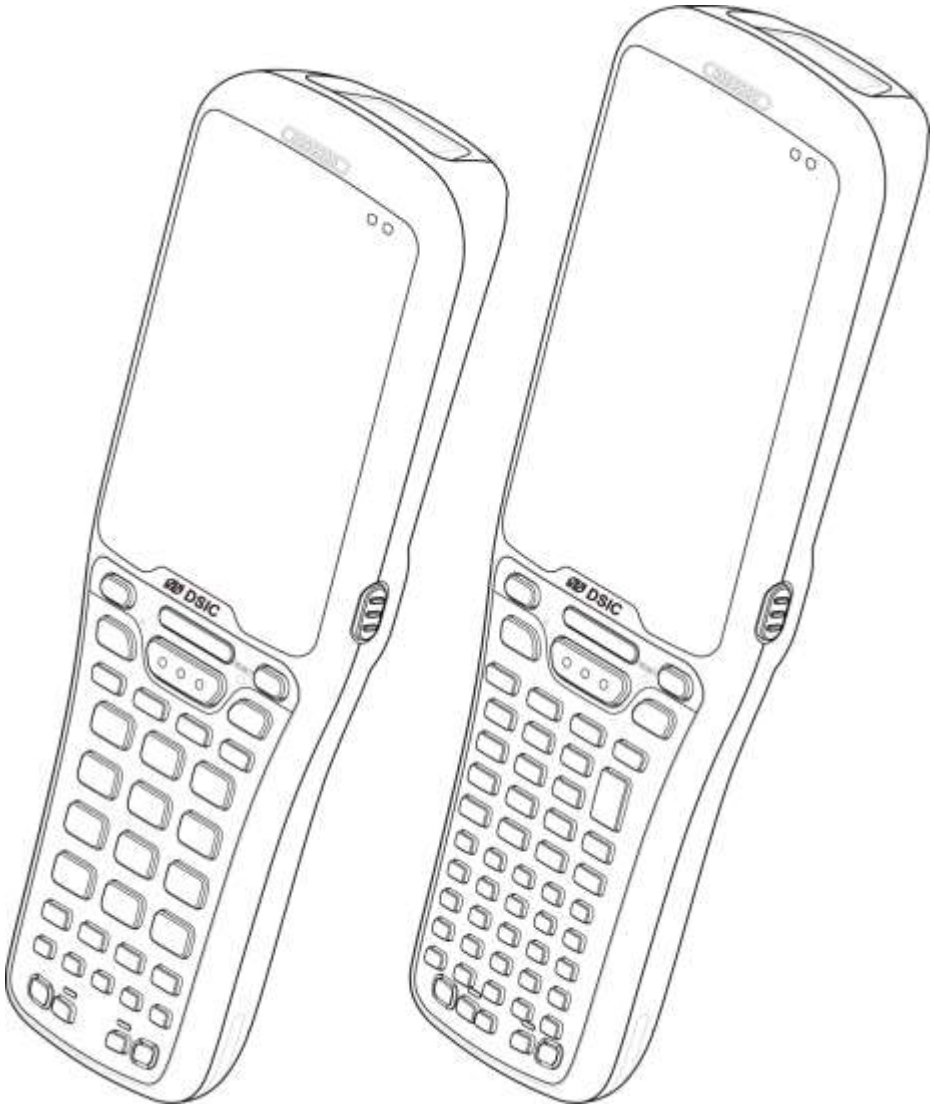
DS5 系类

使用手册

Windows CE6.0 and Windows Embedded Handheld 6.5 (Classic & Professional)

2014.09.16



ISO 9001 Certified

Quality Management System

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前言

关于本使用手册说明如何安装，操作和维护DS5手持式数据采集器。
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安全须知

详细阅读本手册，以保持自己的安全，避免财产损失。

- 确保电池端子（铁的部分）不应于任何导电材料，如一条项链和硬币等。 还要确保电池不应该有牙齿或指甲损坏。 要不然影响可能导致电池爆炸。
- 必须使用专用电池，不使用电池以外的任何用途。如使用非正品，减缩产品寿命期，引起爆炸等
- 充电时必须通过专用座充或 USB 充电线。如使用本司提供配件以外的配件来充电，引起爆炸或缩短设备寿命期。
-

注意激光线 Caution in relation with Laser Scanner

切勿直视激光线，否则会损伤眼睛。

注意有关电池

- 破损电池或冲击加热，浸水和锥子来折卸，引起爆炸的危险。
- 切勿让孩子或宠物来使用。

使用时注意须知

- 本产品在爆发危险地区，乘坐飞机时，或医院里，切勿使用。.
- 设备浸水后，切勿使用，开电源等，引起触电。
- 切勿使用者随意改造，折卸或维修，需要时请联系相关负责人或客服中心。
- 必须设备上的信息，保存其他记录工具上，维修或升级过程中出现信息删除等情况，重要的信息一定备份。
- 切勿使用高温高湿地方， 引起故障原因。
- 信用卡，电话卡，存折等有磁性产品，切勿放在设备附近，设备上的信息，磁性引起毁损

第1章 ：介绍DS5系列

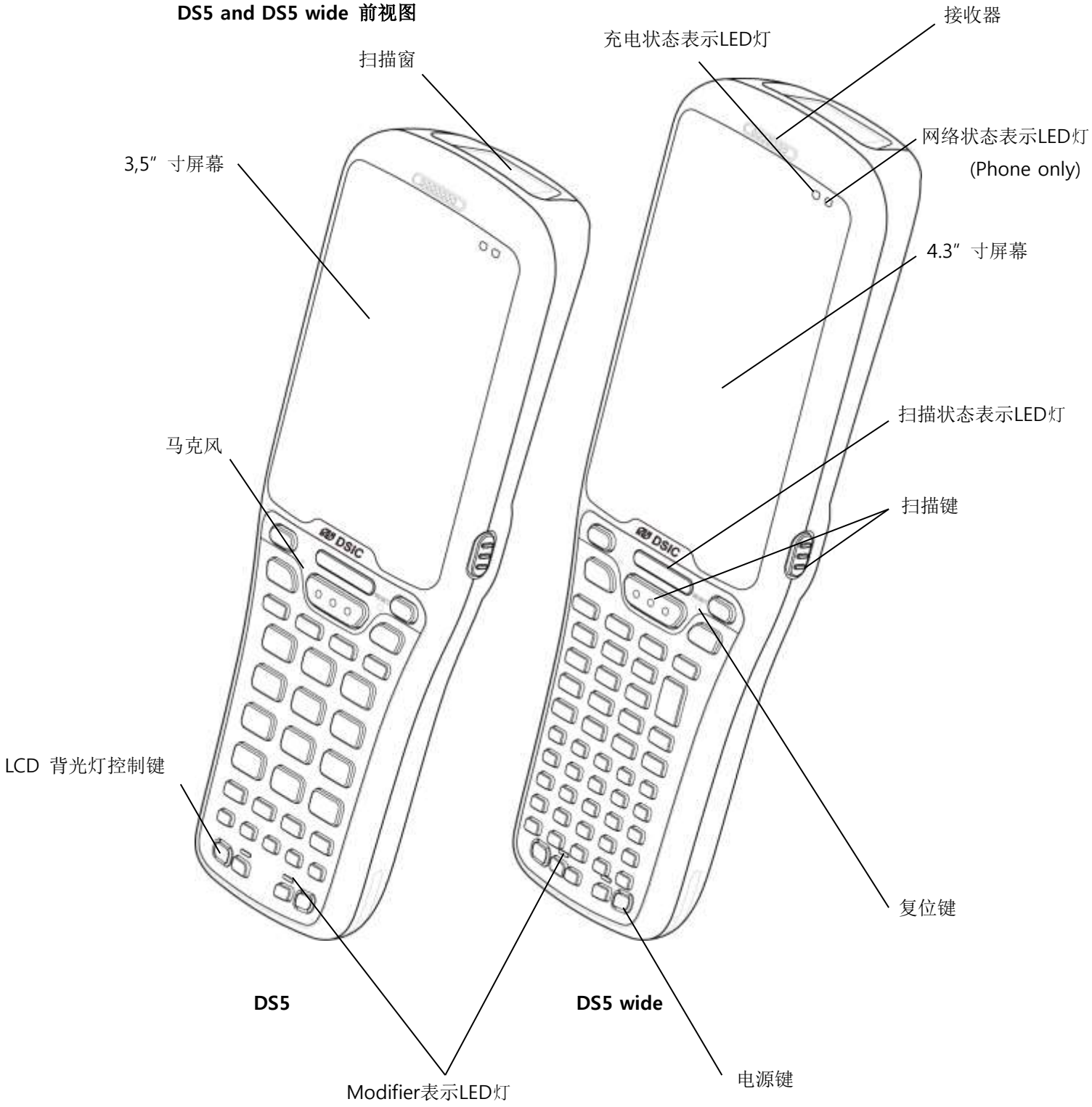
DS5系列在零售，仓库及其他领域行业应用于数据采集和自动化的工业级数据采集器。

DS5系列提供方便的特点和能力在你的手上，包括扫描条码，读写RFID标签，内置摄像头采集图像，并通过广域网和局域网来实时传达数据。

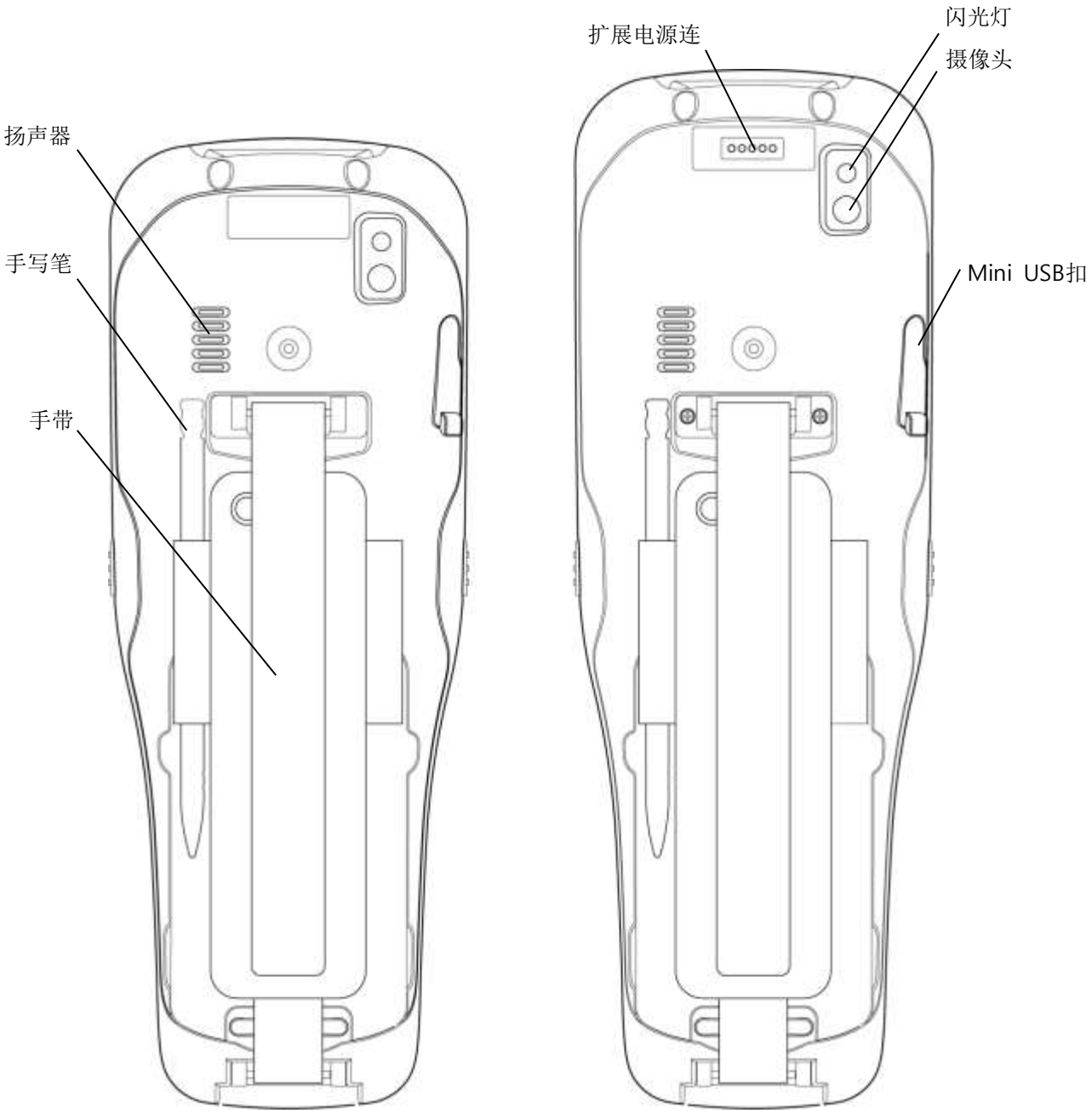
本章描述DS5前/后视图，电池和电源适配器。并非所有功能在本章中描述，可能对你的设备是可用的。

并非所有的功能在本指南中描述可能对您的设备是可用的，若你发现某个躬耕不可用，请及时联系贵司系统负责人。

DS5 and DS5 wide 前视图



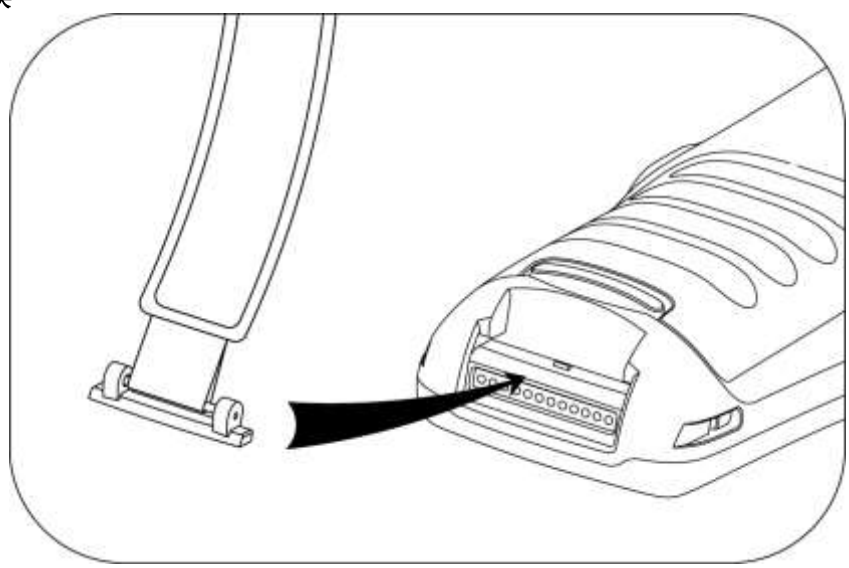
DS5 后视图



DS5 **DS5 wide**

DS5 wide 后视图

手带折卸及更换



电池

警告

万一出现设备湿濡，切勿设备进入加热机器里 (如加热器，微波炉，烤箱等.).
电池加热，引起爆炸，变形或故障等 (类似水的液体进入后，内部颜色可变色)

.

电池电源

型号	描述
DS5	3.7V, 5200mAh (14.8Wh)
DS5 wide	3.7V, 5200mAh (14.8Wh)

第一次使用时必须充满电后使用，电池充电配件一下如何

充电配件	充电时间
mini USB线	大约4个半小时
座充和适配器r	大约4个半小时
Snap on	大约4个半小时
4 连座充	大约4个半小时

电源适配器

充电时必须使用厂家提供的适配器.

电源适配器	规格
mini USB 线	5V, 3A
座充	5V, 3A
Snap on	5V, 3A
4 连座充	5V, 12A

第2章 ：开始

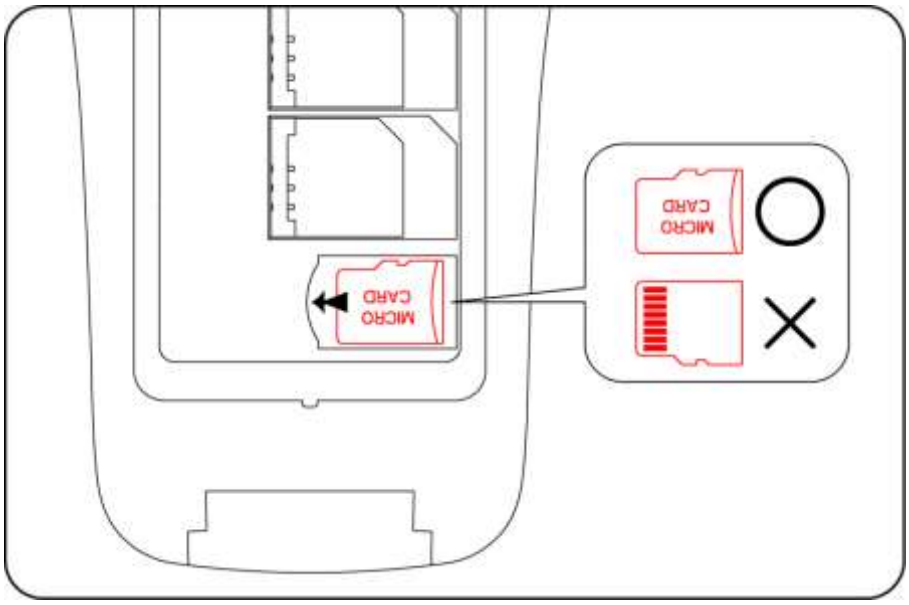
本页描述电池安装及更换方式，安装Micro SD卡和终端开启 l

启动终端l:

- 安装Micro SD卡
- 安装电池
- 连接电源
- 操作终端电源

安装micro SD卡

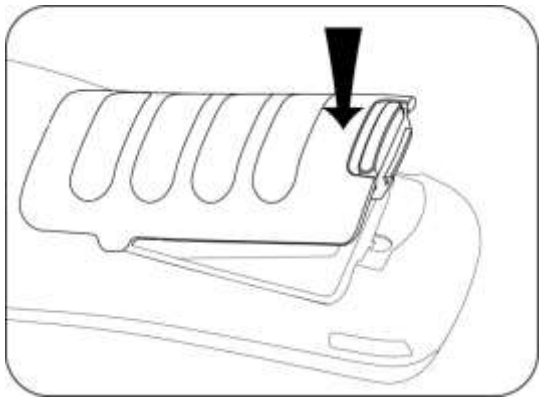
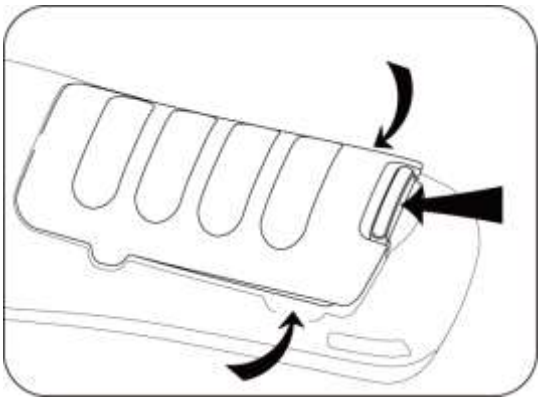
插入micro SD卡时，仔细如下面的插图显示. 插入SD卡之前，先准备micro SD卡.
插入SD卡固定到最后。



提醒

- 插入micro SD开时，注意一下，若强制插入，引起卡损坏。
- micro SD放入位置不准确，引起损坏或功能不良。
- 设备里卡槽部分保持清洁
- micro SD卡寿命到期，保存不了信息，那时采购新的micro SD卡来使用。

电池安装及操作

	
安装和折卸电池时，轻松放下	先推上扣部分后，左右拿出来
插入电池	折卸电池

提醒

电池保养方式

锂离子电池寿命有限，各种因素影响到电池寿命（如环境，保管方式，充电次数，或充电量等）

为了电池寿命延长，请使用以下方式

- 避免高热、高湿的地方
- 若设备不常用，最小每个月充满一次
- 切勿设备放3天以上在座充上。(适配器连接，电源连接的情况下)
- 使用厂家认可的座充和适配器
- 若设备3个月以上不使用或者仓库里保管时,
  - 最合适保管温度 0~25℃
  - 长时间不使用电池，引起放电，放电恶化到电芯，用量或充电功能， 所以建议保管之前重新充电，每3个月一次充电
- 系统升级时，可提供电池寿命优化方式，那时及时升级

运输

锂离子电池，按照法律讲，无限制公路运输，但通过第三方空运或委托运输方，需要各种条件，详细内容，请顾问相关专业机构。

处理l

按照法律，可充电的电池，为了环保，分类到回收类，若使用完成电池可寄到下面地址

DSIC Co., Ltd.

2nd Floor, Daeryung Technotown 3, 448 Gasan-Dong, Guemchun-Gu, Seoul, Korea

Tel. Service: +82-2-2107-5152

Fax: +82-2-2107-5178

Email:pda_service@dsic.co.kr

连接电源

连接电源时，利用如下方式.

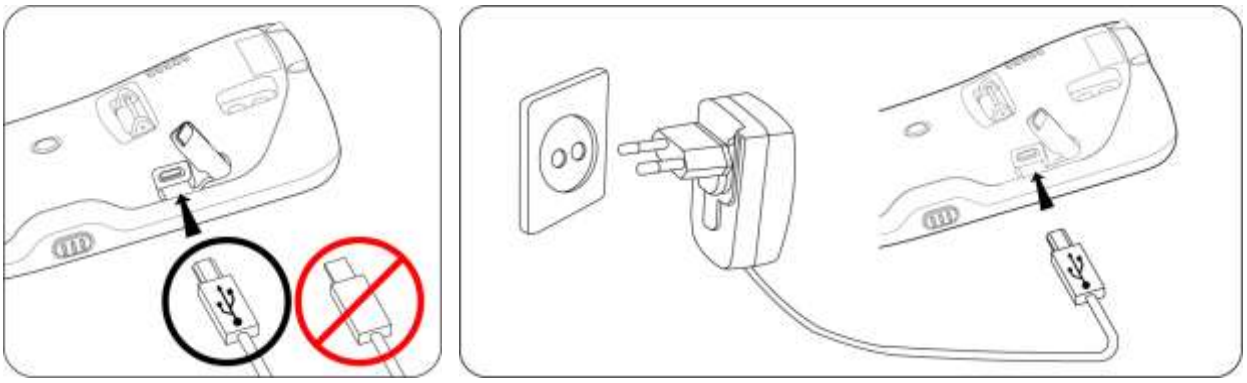
警告

电源连接时，请注意确认放入电池，若没放电池时，连到适配器，出现反复开关情况。而不能正常使用

提醒

适配器或者充电 USB 线断线之前折卸电池，可影响到设备寿命，或故障。

利用mini USB充电



1. 按照照片插入USB线。先插USB扣后，适配器插到电源

2. 充电完成后，先拔出来USB线部分

利用座充

设备放在座充后，座充和适配器连接，然后连接电源

终端电源操作

电源开关

在设备上有电源键 ，开关时长按。

若确认信息时选**OK也是用** ，但长时间按就设备关机。

暂停和回复

电源键按一次进入暂停模式，再按回复

复位

若终端停止，按复位键，停止正在运行的应用程序。终端重启也按复位（Reset）键。

若你没保存是按复位键，不能保证信息存档，可会丢失数据。

第3章 详细了解

电池状态

以下电池表示图案来表示电池状态.

Battery Icon	Status
	充满
	电量较大
	电量中间
	电量较低
	电量不足，需要充电，出现自动关机
	充电中

充电中LED状态表示

区分	颜色	状态
手持终端	红色	充电中
	绿色	充满电
座充	红色	座充上额外电池充电中
	绿色	座充上额外电池充满电
4 连座充	红色	座充上额外电池充电中
	绿色	座充上额外电池充满电
Snap on	红色（终端）	充电中
	绿色（终端）	充满电

额外电池充电

2个配件可充电额外电池

配件名称	描述	充电时间
座充	1台终端和1节额外电池	大约4个半小时
4 连座充	4台终端和4节额外电池	大约4个半小时

Clean Boot

冷启也可以停止正在运行中的所有程序. 然而， 他会删除所有数据和 RAM 上存储的数据。
终端改成出厂默认设置。 万一终端没反应测试复位。.

警告

Clean boot 造成终端出厂默认设置。 所有程序和保存的数据删除，需要 clean boot 一定 IT 负责人的允许上操作。.

提醒

Booting 方式

方式	按键	Registry	Nand空间	RAM (不含 Nand)
出厂设置	+ , reset	删除	删除	删除
Clean	+ , reset	删除	维持	删除
冷启	+ Reset, (back up battery fully discharged)	维持	维持	删除
热启	reset	维持	维持	维持

Backup Manager（备份管理者）

Windows CE 6.0

数据, Windows CE 6.0 注册表通过 Clean boot 后删除。
若保持数据，请使用 Backup manager（备份管理者）
开始 ▶ 程序 ▶ **Backup Manager（备份管理者）**

或

我的设备 ▶ **Windows** ▶ **查看** ▶ 选项. ▶ 文件夹选项里高级设置都不选 ▶ **Backup_manager.Ink**

WEH 6.5

WEH 6.5 数据保存到 **Nand 空间，** Clean boot 后不能删除数据。

Windows CE 画面

在任务栏图标

在桌面底部，任务栏上表示正在运行的程序

图标被设置在终端显示指示的特征的选择状态 在终端上显示图标的功能一下如何

图标	描述
	开始
	界面
	虚拟输入键盘 ：打开SIP (Soft Input Panel)键盘
	连接PC同步状态
	连接适配器Connected with external power
	LAN连接状态
	LAN断线状态
	充电中
	电量低(电量10%~14%状态)
	电量超低，需要更换(电量9%一下)
	网络管理者: - Wireless: WLAN及蓝牙开关 - Battery: 表示电池用量% - Volume: 调整声音 - Backlight: 调整背光 - Task Manager: 打开任务管理器

开始按键(Start Button)

按“**开始**”图标

- **程序**: 表示能使用的整个程序
- **收藏**: 收藏常用的文档
- **文档**: 表示整个文档
- **设置**: 控制面板，网络和拨号连接，任务栏和开始菜单
- **帮助**: 控制键盘设置帮助
- **运行**: 打开程序，文件夹或文件
- **挂起**: 设备停顿. 按电源键 来开启设备

在控制面板上的图标

图标	描述	图标	描述
	背光: 设置背光时间及屏幕背光(按照 Battery Power及AC Power调整）		**Bluetooth设置属性:** Bluetooth管理器
	证书: 表示相关DS5系类证书		**CPU Settings:** Select Power management mode of CPU
	日期/时间: 设定日期/时间和时区		**正在拨号:** 拨号属性
	显示: 更换背景和外观		**输入面板:** 输入法选项
	Internet选项: 关于连接安全性等设置		**键盘:** 设置重复
	鼠标: 设置双击		**网络和拨号连接:** 设置连接，如Dial up, WLAN and Bluetooth
	所有者: 更改所有者属性		**密码:** 设置终端密码
	PC连接:电脑直接连接		**Pocket Controller:** Configure General Settings and status information, such as Mani battery and Back up battery
	电源: 表示电源属性，剩余电量，关机等		**区域设置:** 区域，语言和输入法设置
	删除程序: 删除程序		**SCU:** WLAN网卡程序
	存储管理器:表示存储属性		**Stylus:**
	系统: 表示系统属性		**版本:**关于终端配置信息 硬件软件程序等
	音量和声音: 设置音量和声音		**无线管理者：**开关WLAN和Bluetooth电源程序

Windows Embedded Handheld 6.5 Home Screen

状态栏

今日屏幕

任务托盘

标题栏

状态栏图标

表示设备状态

① 输入模式
② 连接状态
③ 信号感度
④ 声音
⑤ 电池用量
⑥ 时间

图标	描述
输入模式	
12	输入数字
	输入小写(切换键中橙色键按两次)
	输入大写(橙色键按两次，**SHIFT键再按两次**)
Connectivity (WLAN, and Active Sync)	
	连接(SCU已连接)
	未连接(In case SCU activated)
	开启WLAN，但未连接(In case MS Zero Config)

	数据网络未连接. (MS Zero Config)
	通过微软零配置服务使用时，出现图标(WZC : Wireless Zero Config)
	通过微软零配置服务连接状态(WZC : Wireless Zero Config)
	同步连接中(WZC : Wireless Zero Config)
	连接网络，正寻找另外网络(WZC : Wireless Zero Config)
	连接网络，查到另外网络(WZC : Wireless Zero Config)
	可连接网络信息(WZC : Wireless Zero Config)
信号强度 (Cellular, GSM/GPRS, HSPA, UMTS)	
	数据通信信号强
	数据通信无信号
	数据通信关闭
	数据通信无服务
	寻找数据通信信号
	正在传达数据
	SIM卡无法找到
	选择1列
	选择2列
声音	
	振动模式
	声音开启
	声音关闭
电池	
	充满
	电量大
	电量中
	电量小
	电量较低
	充电中
	无电

Icon Bar

拉下来可看到图标状态

图标	描述
	画面扩大
	输入模式
	网络连接状态. 可操作无线管理者(Wireless Manager)
	D数据通信连接状态. 可操作数据通信电源
	声音调整
	电量
	时间和闹钟

Icons in the Task Tray

表示在终端上启动的应用程序

图标	描述
	无线管理者: 开关数据通信，WiFi and Bluetooth
	Barcode Tray: 关于扫描应用程序，参考**Barcode Scanner**

Programs in Start Screen

图标	描述	图标	描述
	条码: 扫描应用程序		**主屏幕:** 返回主屏幕
	Version: 终端版本信息（硬件，软件）		**Backlight:** LCD背光
	数据通信 **:** 操作数据通信		**短信:**
	电子邮件:		**联系人:** Input, edit, search Contact lists
	Internet Explorer: Access Internet Explorer Mobile. Press key to return **Start** menu		**日历:** View calendar and Set scheduler. Press key to return **Start** menu
	设置: Set, or access Bluetooth, Clock & Alarms, Home screen, Lock, Power, Sounds & Notifications, Network Connections, System Information		**入门:** Manual to operate Windows Embedded Handheld 6.5 features
	闹钟: Set time zone and alarm		**图片和视频:** Access Camera application and view Album
	Windows Media: Access music, video, TV, playlists and now playing		**Marketplace:** Purchase applications from the Marketplace
	Messenger: Activate Messenger program		**MSN Weather:** Set your regional weather information
	Windows Live: Access Windows Live		**MSN Money:** Set Stock market information
	计算器: Calculator feature		**游戏:** Microsoft's mobile game application
	便笔: Note pad program. Add, edit, save a note		**Active Sync:** Synchronize your terminal to desktop PC
	任务: Write your work task and Notes		**任务管理器:** Enables viewing of memory and CPU allocations and stops running processes.
	Internet共享: Connect to your PC by Bluetooth, or USB		**帮助:** You can find help document from online Help Site
	搜素手机: Search contacts, data, and other information on the terminal		**远程桌面Mobile:** Log onto Windows NT server type computers and use all of the programs that are available on that computer from your terminal

Setting Applications

Icon	Description	Icon	Description
	蓝牙： Open Microsoft's Bluetooth application to set Bluetooth feature to connect other device in the area		**时钟和闹钟:** Set Time and Alarms
	主屏幕: Select Home theme for your terminal		**锁定：** Set password to lock your terminal
	电源： Displays Main battery power gauge and set battery power saving		**声音和通知:** Set sound and vibration in specific events, and program notification
	个人: Included personal settings		**系统:** Included system settings
连接文件夹			
	无线收发		**连接：** Set up your network connection, such as modem, ISP, VPN and dial up
	域注册： Register your terminal in a domain		**网卡:** Set up network cards such as WLAN, Bluetooth, USB Ethernet and others
	由USB连接到PC: enable, or disable advanced network functionality		**无线管理器：** Power control to Bluetooth and WWAN modem
系统文件夹			
	关于： Terminal information such as OS type, processor, memory and Copyrights. Assigns terminal name to identify from other computer		**Backlight:** Control backlight of LCD and Keypad
	证书: Certificate Information using on the terminal		**客户反馈：** Send feed back to Microsoft about the OS
	加密： Make encryption all your storage files. Encrypted files are only readable		**错误报告:** Reporting error to Microsft to improve better software
	外部GPS: GPS setting program such as GPS program port, hardware port, Baud rate and method to check GPS data in multiple programs		**托管程序：** Displays the program installed in the terminal
	内存: Terminal RAM and ROM (Nand) memory information		**Pocket Controller:** Terminal control application and management
	区域设置: Set region, display type of number, currency, time and data		**删除程序:** Remove program installed in the terminal

	屏幕: Control display orientation type, align screen, font setting to Clear Type and change text size,		**Summit:** Access SCU to control WLAN settings
	任务管理器: Stop running programs and processes		
个人文件夹			
	按键: Setting Hot key and customize Up/Down control. This function needs to set up with registry		**主机信息:** Input the terminal owner information
	Phone: Turning on phone		

LEDs

LED 灯表示电源充电状态，扫描状态表示及网络连接状态

DS5 LEDs位置和表示状态

LED Appearance upon terminal feature

区分	颜色	**描述**图标被设置在终端显示指示的特征的选择的状态
Data capture status LED	Blue	Good read barcode, or RFID
Charging LED	Red	The terminal is in charging status
	Green	The terminal has fully charged
Modem	Off	Phone off status, or modem is not included in the terminal configuration
	Green blinking (3 seconds interval)	Modem is connected to network
	Green blinking (1 second interval)	模块无连接网络
切换键	蓝色	切换后可使用蓝色键
	橙色	切换后可使用橙色键

Keypad键盘

DS5 系列有含10个功能键的数字键盘和全键盘两种

数字键盘

全键盘

数字键说明

说明按键字符输入发. 单字符输入，请按键

需要橙色表示键时，请按橙色键来切换 ，也是切换蓝色，按蓝色键

连续输入小写

- 按两次 橙色键
- 按照英文字母来输入4次
- 按 橙色键一次回复到数字键

连续输入大写

- 按两次橙色键
- SHIFT键按两次后，在下右侧出现
- 按照英文字母位子来输入.
- SHIFT键按一次回复到小写键盘
- 橙色键按后，回复到数字键

例如

- 输入**DEF**
- 按橙色键两次 后, SHIFT 键两次, 3, 3 3, 3 3 3

提醒

若需要找特殊文字和符号，通过下面虚拟键盘输入

按照 SHIFT 键按次数，输入效果不同

状态	Shift 次数	备注
	默认	回复到默认
	SHIFT	一次使用后，回复到原来状态
	SHIFT SHIFT	两次按后，固定Shift键，需要Shift效果的文字连续输入

用54键来输入

下面说明连续输入方式，若需要一般输入法，请看键盘 **Key Strokes**.

输入数字

- 先找要求的数字找一下按.
- 更换键来可选F1到F20.
- 按蓝色键 ，按数据键可选输入F1 ~ F10.
- 按橙色键 ，能输入 F11 ~ F20

输入英文字母

- 默认为小写
- 大写输入一次，请按 SHIFT 键一次后输入
- 大写连续输入，请按 SHIFT 键两次

例如

- 输入 **A1a2**
- 按 SHIFT, A, 1, A, 2

提醒

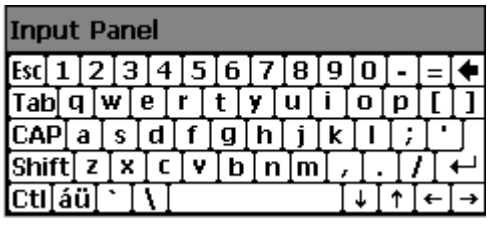
SHIFT 键按一次，只有效一次，表示状态 ⇧

若需要连续输入大写，请按 SHIFT 键两次，表示 ⬆

- 例如**ACDZY**
- 按 SHIFT SHIFT 后, A, C, D, Z, Y

使用SIP (Soft Input Panel、虚拟输入键盘)

在任务栏上看到 图标(Windows CE),或 (Windows Embedded Handheld 6.5)，点击后打开SIP, 再点后消失SIP



Windows CE

Windows Embedded Handheld 6.5

照片: 虚拟输入键盘

调整画面背光亮度

在设备上可以调节画面亮度.

按两次 后,通过 增加（)和 减小（)，亮度减小后，可省电。

键功能为关闭背光，按一次暗下去，再按亮起来

调节音量

按两次 后， 提高（)和 下降（ ）

条码扫描器

DS5的条码性能强，识别率高.

- 执行Barcode Tray
- 校准扫描光线
- 按扫描键

1. 为了读条吗, 如下一样执行**Barcode Tray**:

在Windows CE上执行Barcode Tray

开始 ▶ 程序▶ Barcode

启动后Barcode Tray图标在任务栏上出现

在 Windows Embedded Handheld 6.5上执行Barcode Tray

开始 ▶ Barcode

Barcode Tray图标在命令表示栏出现

2. 校准扫描光线

1维扫描来校准

- 1D 扫描头 ：SE955, SE965, SE1524

提醒

按照模块来不同的读到宽度和距离，而角度斜着也读不到，所以为了准确度到，请距离和角度调整

2维扫描校准

[5100 SR/ N5600 SR/ N5600 HD]

Good		
Wrong		

[5300 SR/ 5300 HD]

Good		
Wrong		

3. 按扫描键后，确认是否出来光线，读成功后提醒方式为铃声，振动或者亮LED灯

提醒读到标签

表示提醒方式

区分	表示方式	表示状态	备注
LED	White（白色）	未完成	通过耳机，车上或者杂音较多的地方
	Amber blue（蓝色）	扫描完成	
铃声	“Bib”声音	读到”Bib”声音	在 **barcode tray 上可设置**
振动	振动	读到振动	在 **barcode tray 上可设置**

摄像头Camera

This section explains how to use the camera on your terminal. You can take photographs and shoot video by using the built-in camera functionality. Your 5 megapixel camera products photos in JPG and BMP format, and videos in ASF format.

Note

DS5 series may vary upon your order configuration. Please check your terminal configuration has included camera in your device. If not, please consult with your sales agent

Using Camera

Taking Photos

Taking picture with your terminal's built-in camera is as simple as choosing a subject, then press ENTER at keyboard, or touch at screen

Note

When taking a photo in direct sunlight or in bright conditions, shadows may appear on the photo.

1. From the main Desktop, **Start ▶ Program ▶ Camera**

Note

If your terminal has camera configuration, the **Program** initially contains the **Camera** icon. If you delete it, or if you want to access the camera at the Program, you must activate Camera once, **My Device ▶ Nand ▶ MBApp ▶** **DS_Camera**

2. Use your main display as viewfinder.
3. Before you take a picture, use the < and > key to zoom in or out. You can magnify up to x4 (400 percent)
4. If desired, before taking the photo, you can tap on-the screen icons to access various camera options and settings.
5. Press icon , or press ENTER key until the shutter sounds. (The picture is automatically stored within your designated storage location. If no microSD is installed, all pictures are stored on the **Nand\Album**. For more information, refer to "Camera Options".
6. While viewing a picture, after you have taken it, press > key to zoom in or < to zoom out. You can magnify the picture up to x4.
7. Press ESC key to return to the viewfinder.

Camera Options

Options are represented as below

Icon	Feature	Description
	Camera mode	Allow you to take a photo in various modes. Tap the icon to switch feature
	Camcorder mode	Allows you to take video. Tap to switch Camcorder mode
	Flash	Allows you to set the flash options to Off, On, or Auto flash
	Settings	· **Album Path:** allows to set storage path you took photo · **Snap Shot:** allows to set resolution, format type and photo quality. - Snap Resolution: 10 different resolutions Min: 176x144 ~ Max: 2592x1944 - Save Type: JPG, BMP - JPG Quality: Low, Mid, High · **Record:** allows to set resolution of photo and video
	Album	Allows you to access Image viewer. The photo you took, will be displayed as a thumbnail in the image viewer icon. Double click a thumbnail to view the photo. Press navigation key board to zoom in ( ) and out ( ), or and to move next photos To return Camera mode, press ESC at key board

Wireless Manager

Before setting up wireless configuration, you need to access Wireless Manager to switch on the radio power.

This application is to set up wireless functionality. To access wireless manager,

- Windows CE 6.0: **Start ▶Setting ▶ Control Panel ▶ Wireless Manager**
- Windows Embedded Handheld 6.5: **Start ▶ Setting ▶ Connections ▶ Wireless Manager**

Power Switch

Following image shows user interface of Wireless Manager. Upon module configuration, it shows radio status of your terminal.

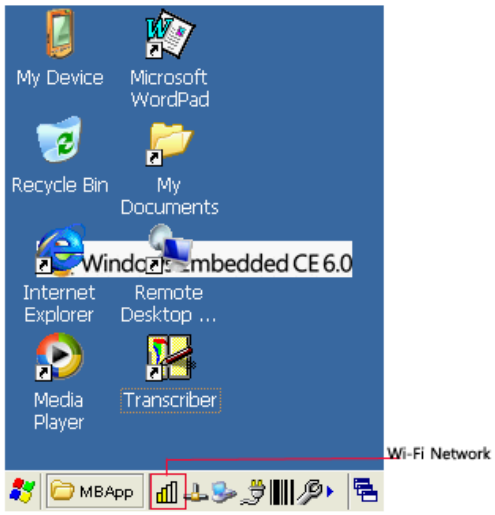
Switch Status

	WiFi	Bluetooth	Phone
Not Supported			
Power on			
Power off			

Wi-Fi Setting

- Power on WiFi power at Wireless Manager
- Open Summit Client Utility
- Configure your WLAN

When you power on WiFi, following WiFi signal will be displayed at your task tray and task bar.

	
Windows CE6.0	**Windows Embedded Handheld 6.5**

Radio Signal Strength

	The radio is not associated/authenticated to an AP
	The signal strength (RSSI) for the current AP (to which the radio is associated) is -90 dBm or weaker, which means that a Summit 802.11b/g radio will operate at 802.11b data rates only
	The RSSI for the current AP is stronger than -90 dBm but not stronger than -70 dBm, which means that a Summit radio will operate at 802.11g or 802.11a data rates that are less than 54 Mbps
	The RSSI for the current AP is stronger than -70 dBm but not stronger than -50 dBm, which means that a Summit radio should operate consistently at 54 Mbps
	The RSSI for the current AP is stronger than -50 dBm

Configuration WLAN – Summit Client Utility

This section describes the steps required to set up Summit Client Utility. It shows review about the options within the SCU tabs – Main, Profile, Status, Diags and Global Settings.

After turn on WiFi Power Switch from Wireless Manager, tab

Control Panel ▶ SCU

Start ▶ Setting ▶ System ▶ SCU

Windows CE6.0 Main Tab Windows Embedded Handheld 6.5 Main Tab

Enable/ Disable Radio: this is toggle button when your WiFi radio is on, the button displays *Disable Radio*. When your radio is off, the button shows *Enable Radio*.

- **Active Profile**: Lists the name of the active configuration profiles. When you select a profile from the chosen drop down menu, the settings for the profile become active. When you select *Third Party Config,* the terminal goes through a power cycle, WZC (Windows Zero Config) is used for configuration..
- **Status**: Indicates if the radio is associated to an AP and, if not, indicates the radio's current status. Potential values include: Down (not recognized), Disabled, Not Associated, Associated, or EAP type authenticated.
- **Radio Type**- Indicates the terminal's radio type including:
  - **BGN** : Summit 802.11 g radio (supports 802.11 b, 802. 11g and 802. 11 n)
- Reg. Domain: Indicates the regulatory domain(s) for which the radio is configured by an administrator of user.
- Auto Profile – Enables the user to activate or deactivate an automatic profile selection facility. Tab **List** and use the dialog box to select a created profile. When the facility is active and the Summit radio makes its first attempt to associate to an AP (after a terminal startup or resume), SCU tries each profile, in order, until the radio associates to

an AP. That profile becomes the active profile and remains the active profile until one of the following occurs:

- The device is suspended and resumed, power-cycled, or restarted, which causes the automatic profile selection facility to restart the selection process.
- The user turns off the automatic profile selection facility and manually selects a different profile on the SCU Main window.

Note

The profile list should not include any profiles with an Ad Hoc Radio Mode setting.

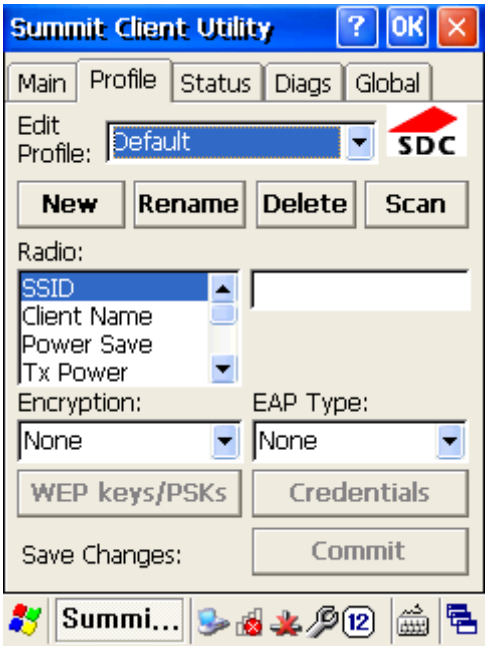
- **Driver**- Indicates the current version of the device driver.
- **SCU**- Indicates the SCU version currently running on the device. Displays only if space permits.
- **Import/ Export** – Displays only if the radio is programmed to allow import/ export functions and if you are logged in as an administrator. Click Import/ Export and use the dialog box to do one of the following:
  - Export global settings, all standard SC profiles, and the special Third Party Config profile from the SCU area of a device's registry to a file that can be transferred to another terminal.
  - Import global settings, all standard SCU profiles, and the special Third Party Config profile from a file (created using the Export facility) to the SCU area of a device's registry to enable SCU to use the information.

Note

- When importing information, select **Add to existing** to merge new information with current registry information. Select **Replace** to overwrite the current registry information with the newly-imported information.

Profile

The profile settings are radio and security settings that are stored in the registry as part of configuration profile. When a profile is selected as the **Active Profile** on the Main tab, the setting for that profile become active. You can define up to 20 profiles. Profile changes are not saved to the profile until you click **Commit**



- **Edit Profile** – Use the drop-down menu to select the profile to be viewed or edited. Only an administrator can edit a profile
- **Actions** – Actions included New, Rename, Delete, and Scan. New, Rename and Delete are only available to an administrator.
  - **New**: Create a new profile with default settings. Assign a unique name (a string of up to 32 characters). Edit profile settings using other profile window selections.
  - **Rename**: Change the profile name to one that is not assigned to another profile
  - **Delete**: Delete a non-active profile. You cannot delete an active profile.
  - **Scan**: Click to view a list of APs that are broadcasting SSIDs; select an SSID and create an profile for it. See "Using Scan to Create a Profile" for more information

Note

  - If WLAN is off (**Enabled Radio** status at **Main** tab), Scan button is not activated.

- **Radio** – Select a radio attribute from the list on the left to view its value or setting in the box on the right. Only an administrator can edit these values or settings. For more information, see **Radio Settings**
- **Security** – Values for the two primary security attributes, EAP type and encryption type, are displayed in separate drop-down lists with the current the current values highlighted. Only an administrator can edit these security settings.
- **Encryption** – When the administrator selects and encryption type that requires the definition of WEP keys or a pre-shared key (PSK), the WEB keys/PSKs button become active. Click **WEP keys/PSKs** to define WEP keys or a PSK.
- **EAP Type** – When the administrator selects an EAP type, the Credentials button becomes active. Click **Credentials** to define authentication credentials for the selected EAP type.

- **Save Changes** – To save changes for the selected profile, you must click **Commit**. If you make changes without clicking **Commit** and attempt to move to a different SCU windows, a warning message displays and provides the option of saving your changes before you leave the Profile window.

Radio Settings

- **SSID** – Service set identifier for the WLAN to which the radio connects.
  - Value: A string of up to 32 characters
  - Default: None (Warning! This setting allows association to the strongest unsecured detected network.)
- **Client Name** - The name assigned to the Summit radio and the client device that uses it.
  - Value: A string of up to 16 characters
  - Default – None
- **Power Save** – Indicates the radio's power save mode.
  - Value:
    · CAM – Constantly Awake Mode
    · Maximum – Maximum power savings
    · Fast – Fast power save mode
  - Default – Fast
- **Tx Power** – Indicates transmit power. Transmit power can be overridden by a Cisco AP if the CCX support global setting is set to Full and the AP defines maximum transmit power for the client as a lower value.
  - Value:
    · Maximum – Maximum defined for current regulatory domain
    · One of the following values in milliwatts (mW): 50, 30, 20, 10, 5, 1
  - Default: Maximum
- **Bit Rate** – Indicates the bit rate used by a radio when interacting with a WLAN AP.
  - Value: Auto (rate negotiated automatically with AP) or one of the following rates in megabits per second (Mbps): 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54.
  - Default: Auto
- **Radio Mode** – Use of 802.11 a, 802.11g, 802.11b, and 802.11n frequencies and data rates when interacting with AP, or use of ad hoc mode to associate to a client radio instead of an AP.

  When SCU operates with a Summit 802.11g radio, an administrator can select from among the following Radio Mode values:
  - Value:
    · B rates only – 1, 2, 5.5, and 11 Mbps
    · G rates only – 6, 9, 12, 18, 24, 26, 48, and 54Mbps
    · BG rates optimized – 1, 2, 5.5, 6, 11, 24, 36, and 54 Mbps. This should only be used

with Cisco APs running IOS in autonomous mode (without controllers, For Cisco APs that are tied to controllers and for non-Cisco APs, Summit recommends BG rates full.)

Security Settings

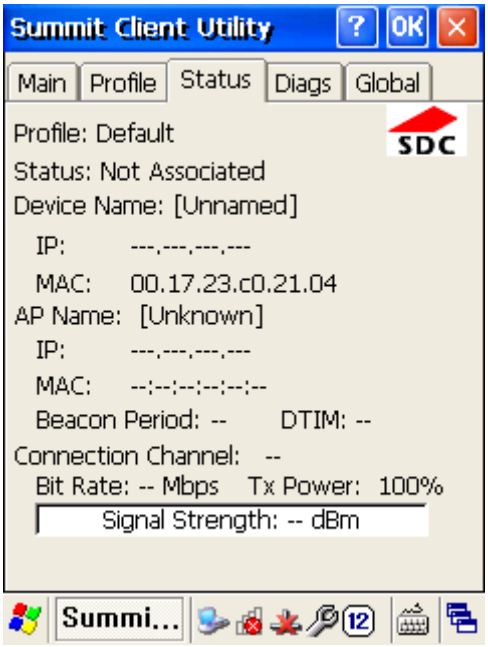
- **EAP type** – Extensible Authentication Protocol type used for 802.1x authentication to AP.
  - Value: None, LEAP, EAP-FAST, PEAP-MSCHAP, PEAP-ETC, PEAP-TLS, EAP-TLS, EAP-TTLS
  - Default: None
- **Credentials** – Authentication credentials for the selected EAP type.
- **Encryption** – Type of encryption (and decryption) used to protect transmitted data.
  - Value
    - · None: No encryption
    - · WEP: WEP with up to four static keys (40 bit or 128 bit in ASCII or hex) defined under WEP/ PSK Keys.
    - · WEP EAP – WEP with key generated during EAP authentication
    - · WPA-PSK (WPA Personal) – TKIP with PSK (ASCII passphrase or hex PSK) defined under WEP/PSL Keys.
    - · WPA-TKIP (WPA Enterprise) – TKIP with key generated during EAP authentication
    - · WPA CCKM (WPA Enterprise) – TKIP with key generated during EAP authentication and with Cisco key management protocol for fast re-authentication
    - · WPA2-PSK (WPA2 Personal) – AES with PSK (ASCII passphrase or hex PSK) defined under WEP/PSK Keys.
    - · WPA2-AES (WPA2 Enterprise) – AES with key generated during EAP authentication.
    - · WPA2-CCKM (WPA2 Enterprise) – TKIP with key generated during EAP authentication and with Cisco key management protocol for fast re-authentication.

Third Party Config

If you choose to configure *ThirdPartyConfig*, the *SCU* will work with the operating system's *Windows Zero Config* (WZC) to configure radio and security settings for the radio installed in the unit.

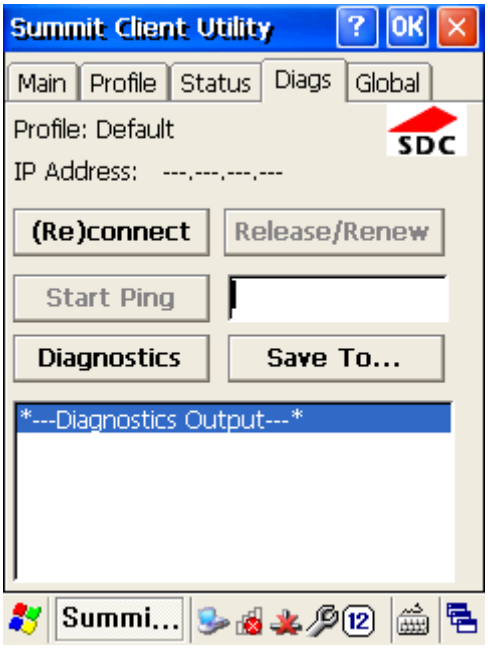
Choosing this *profile* means that *WZC* must be used to define the following radio and security options: *SSID*, *Auth Type*, *EAP Type* and *Encryption*. The SCU settings for *ThirdPartyConfig* include: *Client Name*, *Power Save*, *Tx Power*, *Bit Rate* and *Radio Mode*.

Status



The *Status* tab provides status information including IP address and MAC address for the client radio, IP address and MAC address for the AP, signal strength, channel, transmit power and data rate.

Diags



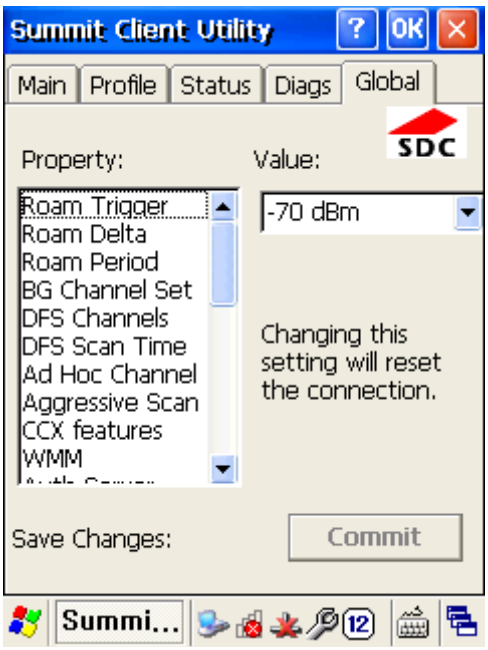
The following functions are available from the Diags window:

- **(Re)connect** – Disable and enable the radio, apply or reapply the current profile, and attempt to associate and authenticate to the wireless LAN, logging all activity in the

output area at the bottom.

- **Release/ Renew** – Obtain a new IP address through DHCP release/renew and log all activity in the output area at the bottom.
- **Start Ping** – Start a continuous ping to the address in the edit box next to the button. Once the button is clicked, its name and function change to Stop Ping. Pings continue until you click Stop Ping, move to an SCU window other than Diags or Status, exit SCU, or remove the radio.
- **Diagnostics** – Attempt to (re) connect to an AP and provide a more thorough dump of data than is obtained with (Re)connect. The dump includes radio state, profile settings, global settings, and a BSSID list of APs in the area.
- **Save to...** - Save the diagnostics output to a file.

Global



The *Global* settings tab allows you to define radio and security settings that apply to all *profiles*, along with settings that apply specifically to the *SCU*.

Global Setting	Description	Value	Default
Roaming Trigger	If RSSI from AP is less than roam trigger value, radio performs roam scan or probes for an AP with stronger signal.	-50, -55, -60, -65, -70, -75, -80, -85, -90, or Custom	-70 dBm
Roam Delta	When Roam Trigger is met, a second AP's signal strength (RSSI) must be Roam Delta dBm stronger than moving average RSSI for current AP before	5, 10, 15, 20, 25, 30, 35, or Custom	15 dBm

	radio will attempt to roam to the second AP		
Roam Period	After association or roam scan (with no roam), radio will collect RSSI scan data for **Roam Period** seconds before considering roaming	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, or Custom	10 sec
BG Channel Set	Defines the 2.4GHz channels to be scanned when the radio is contemplating a roam and needs to determine what APs are available.	Full; 1,6,11 (the most commonly used 2.4 GHz channels); 1,7,13 (for ETSI and TELEC radios only); or Custom	Full
DFS Channels	Support for 5GHz (802.11a) channels where support for dynamic frequency selection (DFS) is required. Supported in v2.0 and later	On, Off, Optimized	Off
DFS Scan Time	Because passive scanning consumes a longer period of time, this feature enables you to determine the dwell time when passively scanning on a DFS channel.	A number between 20~500 milliseconds (ms). Recommending 1.5 times dwell time that of beacon period. For example, DFS scan time is set to 30ms, the beacon period should be adjusted to 20ms	120
Ad Hoc Channel	The channel to be used for an ad hoc connection if the active profile has an Ad Hoc radio mode value.	One of the 2.4GHz channels (1~14), or UNII-1 channels (36, 40, 44, 48). If you select a channel that is not supported by your radio, the SCU uses the default value for this setting	1
Aggressive Scan	When this setting is On and the current connection to an AP becomes tenuous, the radio scans for available APs more aggressively. Aggressive scanning complements and works in conjunction with the standard scanning that is configured through the Roam Delta,	On, or Off	On

	and Roam Period settings. Summit recommends that the Aggressive Scan global setting be On unless there is significant co-channel interference because of overlapping coverage from APs that are on the same channel		
CCX features	Use of Cisco information element (IE) and CCX version number; support for CCX features.	Full: Use Cisco IE and CCX version number which is supporting all CCX features Optimized: Use Cisco IE and CCX version number which is supporting all CCX features except AP-assisted roaming, AP-specified maximum transmit power, and radio management. Off: Do not use Cisco IE and CCX version number	Optimized
WMM	Use of Wi-Fi Multimedia Extensions, also known as WMM.	On or Off	N/A
Auth Server	Type of authentication server being used for EAP authentication	Type 1 – Cisco Secure ACS or another server that uses PEAPv1 for PEAP with EAP-MSCHAPV2 (PEAP-MSCHAP) Type 2 – A different authentication server, such as Juniper Networks Steel RADIUS, that uses PEAPv0 for PEAP-MSCHAP	Type 1
TTLS Inner Method	Authentication method used within secure tunnel created by EAP-TTLS	Auto-EAP – Any available EAP method	Auto-EAP

		MSCHAPV2 MSCHAP PAP CHAP EAP-MSCHAPV2	
PMK Caching	When WPA2 is in use, type of Pairwise Master Key (PMK) caching to use	Standard or OPMK When switching from Standard to OPMK, you must initiate a suspend resume of the device. Only tapping **Commit** does not cause the change to take effect.	Standard
TX Diversity	How to handle antenna diversity when transmitting data to AP	Main only: Use main antenna only Aux only: Use auxiliary antenna only Summit does not support the AUX antenna as a single antenna solution On: Use diversity	On
RX Diversity	How to handle antenna diversity when receiving data from AP.	On-Start on Main: On startup use main antenna On-Start on Aux: On startup, use auxiliary antenna Main only: Use main antenna only Aux only: Use auxiliary antenna only Summit does not support the AUX antenna as a single antenna solution	On-Start on Main

Frag Thresh	If packet size (in bytes) exceeds threshold, then packet is fragmented.	An integer from 256 to 2346	2346
RTS Thresh	Packet size above which RTS/CTS is required on link.	An integer from o to 2347	2347
LED	Use of LED; DS5 is not supporting this feature	On, Off	Off
Tray Icon	Enabling of System Tray Icon.	On, Off	On
Hide Password	If this is On, then SCU as well as EAP authentication dialog boxes mask passwords and other sensitive information, such as WEP keys.	On, Off	Off
Admin Password	Password that must be specified when Admin Login button pressed.	A sting of up to 64 characters	SUMMIT
Auth Timeout	Specifies the number of seconds that Summit software waits for an EAP authentication request to succeed of fail. If authentication credentials are specified in the active profile and the authentication times out, the association fails. If authentication credentials are not specified in the active profile and the authentication times out, then the user is prompted to re-enter authentication credentials.	An integer from 3 to 60	8
Certs Path	Directory where certificate(s) for EAP authentication are stored.	A valid directory path of up to 64 characters	Depends on device
Ping Payload	Amount of data in bytes to be transmitted on a ping	32,64, 128, 256, 512, 1024	32 bytes
Ping Timeout	Amount of time in milliseconds that transpires without a response before ping request is consider a failure	An integer from 1 to 30000	5000
Ping Delay ms	Amount of time in milliseconds between successive ping requests	An integer from 0 to 7200000	1000

When global settings are changed on the window and **Commit** is clicked, the changes take effect immediately.

Two exceptions include the WMM and DFS Channels settings. If you change either of these settings, you must do a power cycle or suspend/resume on the device to cause the change to take effect. To cause global settings changes to take effect without a power cycle, Summit software may have to reset and re-establish the WLAN connection between the Summit radio and the access point. If you make changes without clicking **Commit** and attempt to move to a different SCU window, SCU displays a warning message and gives you the option of saving your

changes before you leave the Global window.

Wi-Fi Roaming

Summit provides two complementary sets of roaming algorithms to provide for more reliable connectivity. Those sets of algorithms are;

- **Standard**: which manages roaming behavior under typical conditions. Users can adjust Standard Roaming parameters to customize roaming behavior for a particular environment.
- **Aggressive**: which manages roaming behavior when the station device is in areas of particularly low coverage and is in imminent jeopardy of losing its connection to the network infrastructure. Users may not adjust Aggressive Roaming parameters but may disable this feature.

Bluetooth Setting

Caution

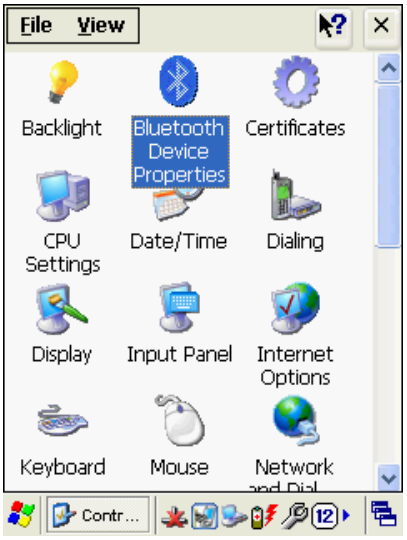
The open COM port at DS5 is COM6, COM9

At Windows CE6.0, it assigns COM6 first. If COM6 is pre-assigned, then it try to assign to COM9.

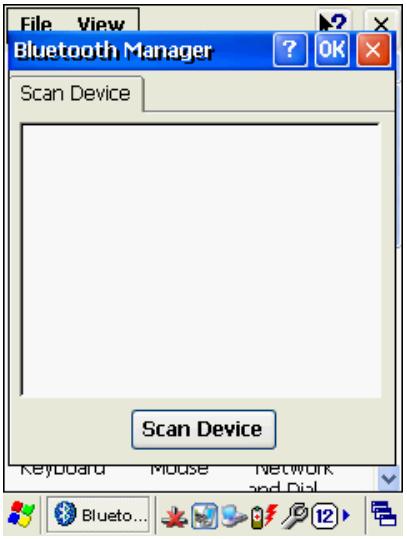
At WEH 6.5, it is selectable one of COM port between COM6 and COM9

Windows CE6.0

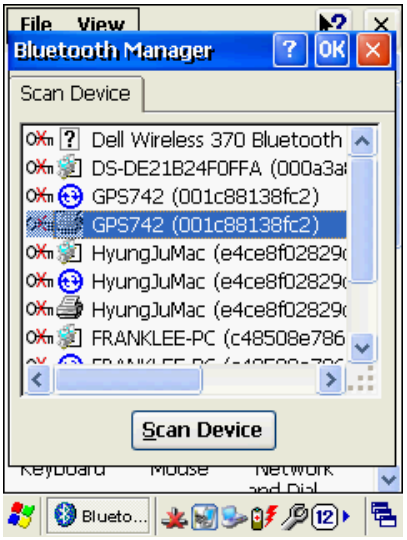
1. Power on Bluetooth module. (Go to **Wireless Manager** to turn on Bluetooth)
2. Click Start ▶ **Settings** ▶**Control Panel** ▶ **Bluetooth Device Properties**



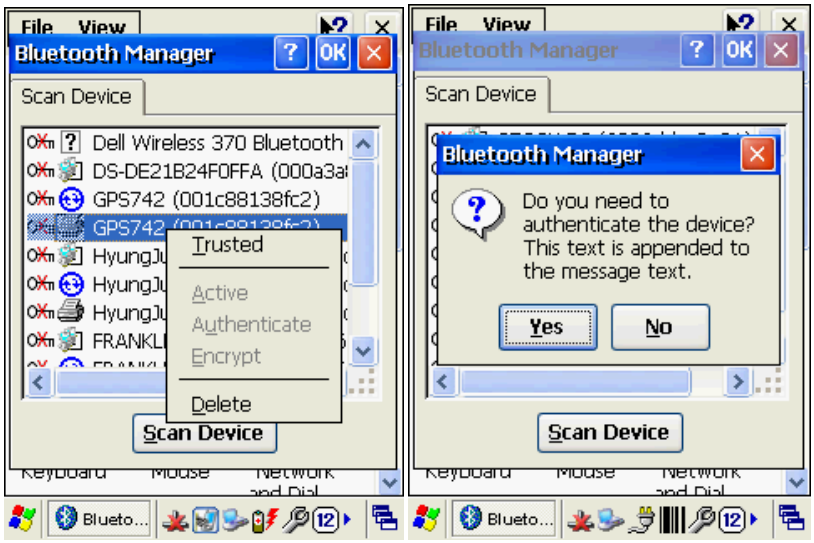
3. Click **Scan Device**



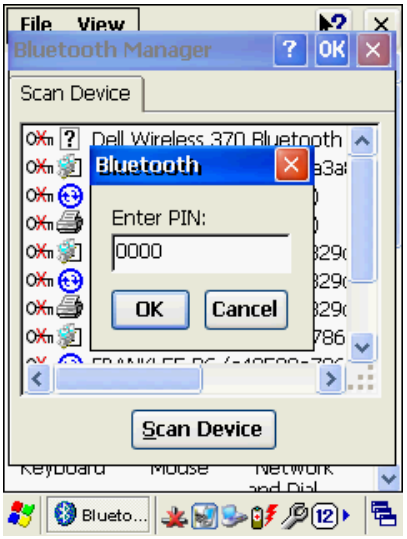
4. Select your Bluetooth device and double click the device name



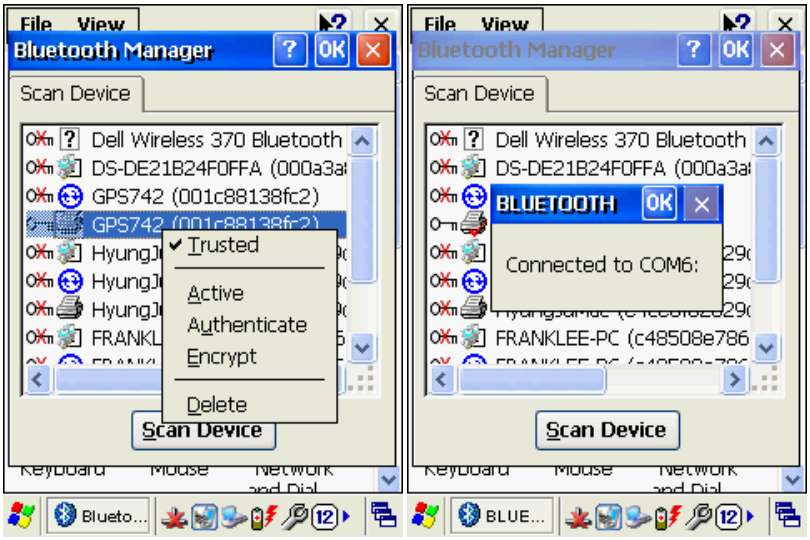
5. Select **Trusted** to open PIN input window



6. Enter your PIN number



7. After your PIN number validation, double click the Bluetooth name. then select **Active**
   Your **COM** information will be displayed after success

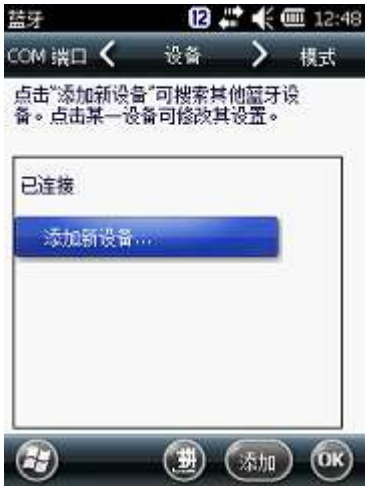


WEH6.5

1. Power on Bluetooth module. (Go to **Wireless Manager** to turn on Bluetooth)

2. Click **Menu** at bottom of display and select **Bluetooth Settings**

3. Select **Add new device** to scan Bluetooth around the terminal



4. Select your Bluetooth device. Then press next at bottom of display menu

5. Enter **Passcode** to secure your connection

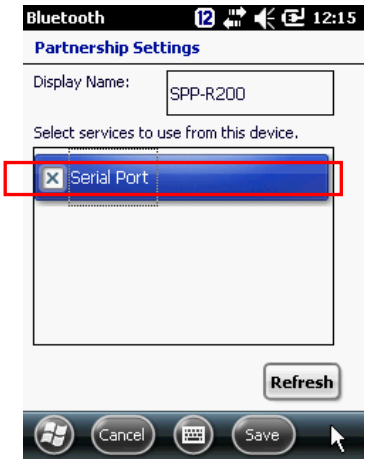
6. When your device added, press **Done** at bottom of display menu

7. Assign a COMPORT. Click your Bluetooth device name

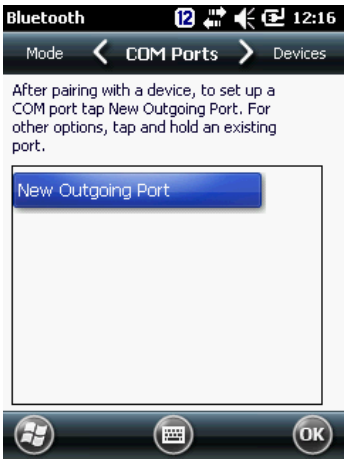
8. Select **Serial Port** as picture, and select Save at bottom of display menu

Caution

In case you don't select Serial Port at this stage, you will have error when you delete the Bluetooth profile.

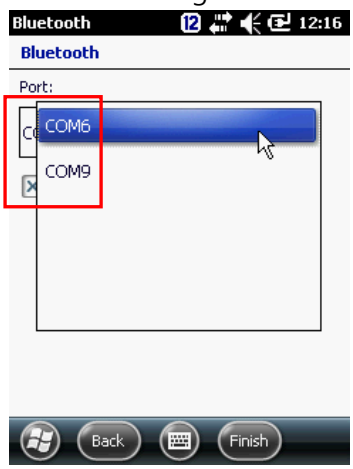


9. Select **COM Ports** at top menu, then click **New Outgoing Port**

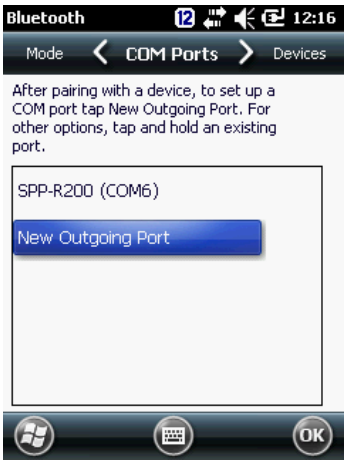

Bluetooth
12:16
Mode
COM Ports
Devices
After pairing with a device, to set up a COM port tap New Outgoing Port. For other options, tap and hold an existing port.
New Outgoing Port
OK

10. Select **Next** at bottom of display menu

11. Select appropriate COM Port, which is not assigned. Then select **Finish**



12. Select **OK**

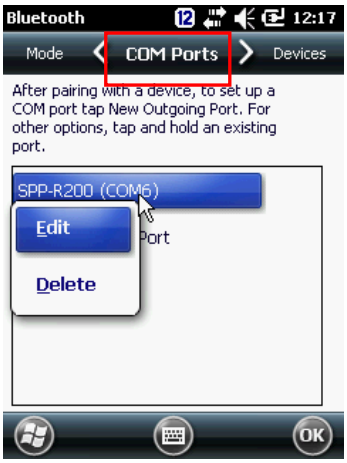

Bluetooth
12:16
Mode
COM Ports
Devices
After pairing with a device, to set up a COM port tap New Outgoing Port. For other options, tap and hold an existing port.
SPP-R200 (COM6)
New Outgoing Port
OK

Bluetooth setting trouble

In any case you delete the assigned Bluetooth device and have to reassign SAME, or different Bluetooth device, please follow below delete and reassign comport process. Windows Mobile 6.5 is keeping the last registry record, and it interferes reassigning the Bluetooth device to the same port.

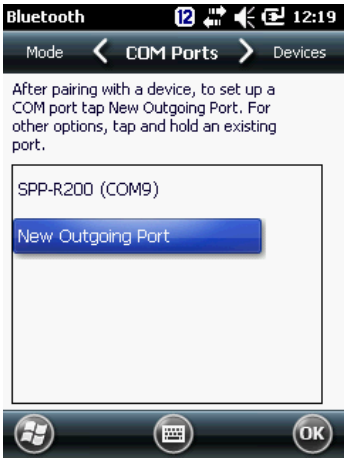
Microsoft Windows Mobile 6.5 recommends step 8 **"Select services to use from this device"**
If you have forgotten this step, you need to delete the assigned profile, and resetting process.

1. Delete the assigned COM. Or cold boot to delete registry value.



2. Resetting Bluetooth in proper way. Make sure to check Step 8 **"Select services to use from this device"**

3. Set **COMPORT** again.


Bluetooth
12:19
Mode
COM Ports
Devices
After pairing with a device, to set up a COM port tap New Outgoing Port. For other options, tap and hold an existing port.
SPP-R200 (COM9)
New Outgoing Port
OK

4. When you delete the assigned **COMPORT**, then it shall be deleted all information including recorded registry.

Bluetooth
12:19
COM Ports
Devices
Mode
Tap Add new device to search for other Bluetooth devices. Tap on a device to modify its settings.
Connected
Add new device...
Edit
Delete
Connect
Connect
OK

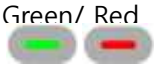
Appendix Ⅰ Key Strokes

DS5 series inter-changeable different types of keyboards in simple manual way. Following tables are how to make key character entry using keypads. Characters are not mentioned at this key stroke sequence, it is also available in Soft Input Panel (SIP)

- 38-key Descriptions
- 54-key Descriptions
- DS5 and DS5 wide Alphanumeric Characters
- DS5 and DS5 wide Special Functions

DS5 and DS5 wide 34 Key Descriptions

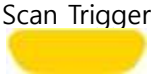
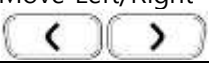
34K-key has Alpha and numeric input in a key. Also, programmable keys are available using function keys from up to F1~F10

Key	Description
Power	Turns on the terminal and off.
Green/ Red 	Programmable keys. Blue-bar key is used when Cold boot and Factory reset
Scan Trigger	Scanning button barcode scanner, or RFID
ESC	Escape the current operation
Enter	Execute selected item or function
Move Left/Right	Moves left and right. With blue modifier on. it can adjust LCD back light levels
Move Up/Down	Moves page, or items lists up and down. With blue modifier, it can adjust volume level
Alphanumeric	Input numeric in default. With orange modifier, it can switch numeric to alphabet character input
Tab/Back Tab	Tabulator key which is used to advance the cursor to the next tab stop. With Orange modifier on, the function switch to back tab.
Shift	It is modifier key which is used to type capital letters and other alternative upper characters.
Control	It is modifier key which, when pressed in conjunction with another key, performs a special operation, for example Ctrl+C. similar to the Shift key.

	Pressing Blue modifier key, the function change to Alt key
Space/ Back Space	Space: its main purpose is to conveniently enter a space. Back Space: it moves the display cursor one position backwards, delete the character at that position. And shift back the text after that position by one position.
Function	Programmable key buttons. Default F1~F5, press blue modifier key for F6~F10
Orange Modifier	Function key to input Alphabet. Pressing 1 time is to apply single effect and back to default. Press 2 times to keep the function continuously.
Blue Modifier	Function key to execute special function, or special characters. Press 1 time is to apply single effect and press 2 times to keep its function continuously.
LCD lighting Control	It controls LCD back light. Press the button to display brightest, and press again to the dim status you had set using left/right button

DS5 and DS5 wide 54 Key Description

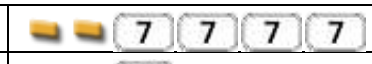
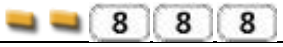
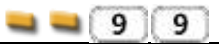
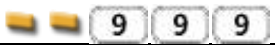
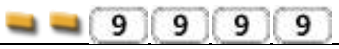
54 key has full alpha-numeric key board. Programmable keys are able to be assigned from F1 to F20 using modifier keys.

Key	Description
Power	Turns on the terminal and off.
Green/ Red	Programmable keys. Blue-bar key is used when Cold boot and Factory reset
Scan Trigger 	Scanning button barcode scanner, or RFID
ESC	Exit the current operation
Tab	Tabulator key which is used to advance the cursor to the next tab stop. With Orange modifier on, the function switch to back tab.
Enter	Execute selected item or function
Move Left/Right 	Moves left and right. With blue modifier on. it can adjust LCD back light levels
Page Up/Down	Moves page, or items lists up and down. With blue modifier, it can adjust volume level
Numeric	Input numeric. Execute preset function, or application by your IT desk, press blue modifier for F1~F10 and orange modifier for F11 ~ F20

Alphabet	Input alphabet. Default is lower characters. Press SHIFT to input upper characters.
Shift	It is modifier key which is used to type capital letters and other alternative upper characters.
Control	It is modifier key which, when pressed in conjunction with another key, performs a special operation, for example Ctrl+C. similar to the Shift key. Pressing Blue modifier key, the function change to Alt key
Back Space	It moves the display cursor one position backwards, delete the character at that position. And shift back the text after that position by one position. Press Blue modifier for Space function.
Modifier (Orange)	Function key to access F11 ~F20
Modifier (Blue)	Function key to access F1~F10 and special characters and features
LCD lighting Control	It controls LCD back light. Press the button to display brightest, and press again to the dim status you had set using left/right button

DS5 and DS5 wide Alphanumeric Characters

Character	Numeric Keypad	Full Alpha Numeric Keypad
a	2	A
b	2 2	B
c	2 2 2	C
d	3	D
e	3 3	E
f	3 3 3	F
g	4	G
h	4 4	H
i	4 4 4	I
j	5	J
k	5 5	K
l	5 5 5	L
m	6	M
n	6 6	N
o	6 6 6	O
p	7	P
q	7 7	Q
r	7 7 7	R

s		
t		
u		
v		
w		
x		
y		
z		
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		
K		
L		
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Q		
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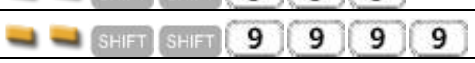
V		
W		
X		
Y		
Z		
0		
1		
2		
3		

4		
5		
6		
7		
8		
9		

DS5 and DS5 wide Special Functions

Character	Numeric Keypad	Full Alpha Numeric Keypad
. Decimal/Full stop		
OK OK		
+ Plus		
- Hyphen/Minus		
* Asterisk		
/ Slash(Punctuation)		
# Number Sign		
 Start Menu		
= Equals		
< Less-than		
> Greater-than		
: Colon		
; Semicolon		
, Comma		

? Question		
@ @		
$ Dollar		
% Percent		
^ Caret		
& Ampersand		
' Apostrophe		
" Quotation		
(Parentheses		
) Parentheses		
| Vertical bar		
~ Tilde		
! Exclamation		

Chapter 4: 管理手册

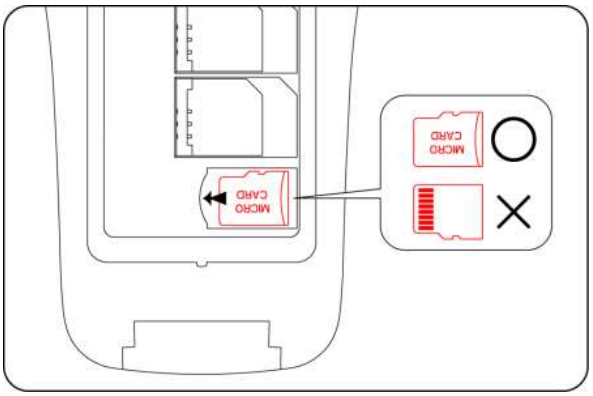
OS升级

Windows CE6.0/ WEH6.5/DS5/DS5 Wide

提醒

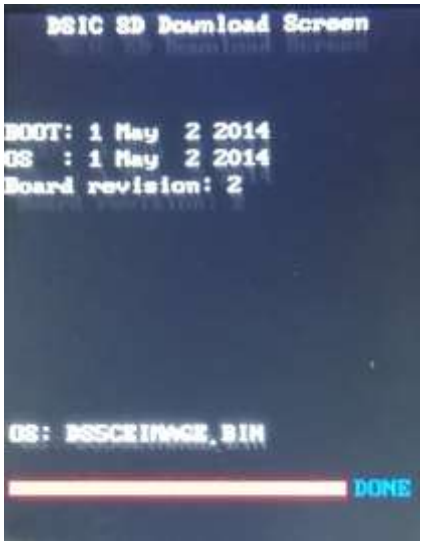
OS升级时通过micro SD卡来操作，请你先SD卡格式化和电池充满电。

1. 升级的系统版本复制到SD卡里
2. micro SD卡插到设备里的卡槽



3. 同时按 ESC 2 后，按复位键（RESET），过几秒后出现以下画面

image.bin文档复制同时安装完成后，出来下面画面



4. 按复位键（RESET）后，出来下面画面

设备自动重启

SDK

Windows CE6.0: 需要时，请联系相关负责人，申请DS5_SDK.msi档案

WEH6.5: DS5使用微软提供的SDK. ，为了使用DTK (Developer Tool Kit), 请你先安装SDK (Software Development Kits) 。

WEH 6.5 SDK & DTK

Windows Mobile 6 Professional and Standard Software Development Kits Refresh
http://www.microsoft.com/download/en/details.aspx?id=6135

Windows Mobile 6 Localized Emulator Images
http://www.microsoft.com/download/en/details.aspx?id=7974

Windows Mobile 6.5.3 Developer Tool Kit
http://www.microsoft.com/download/en/details.aspx?id=5389

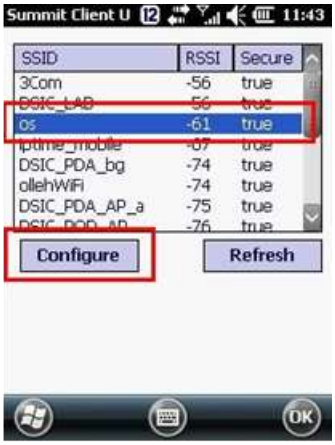
Wi-Fi connection through SCU (Summit Client Utility)

1. Power on Wi-Fi module. (Go to **Wireless Manager** to turn on Wi-Fi module)
2. Click Wi-Fi signal icon as below image

3. Click Profile tab to set your Wi-Fi

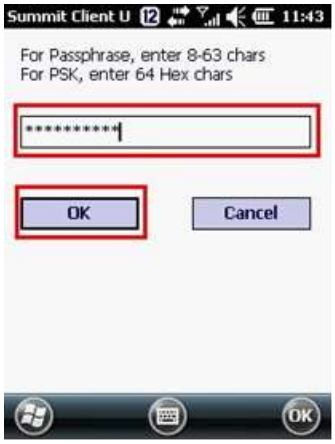
4. Click Scan to search Wi-Fi SSID around your device. If your AP's SSID is in hidden mode, you are not able to see and you need to input manually.

5. Select your SSID, and click **Configure**



6. Select **Yes** to save your SSID. This process to save your SSID to the device not to re-input the SSID on your device.

7. Input your network password. Then **OK**.

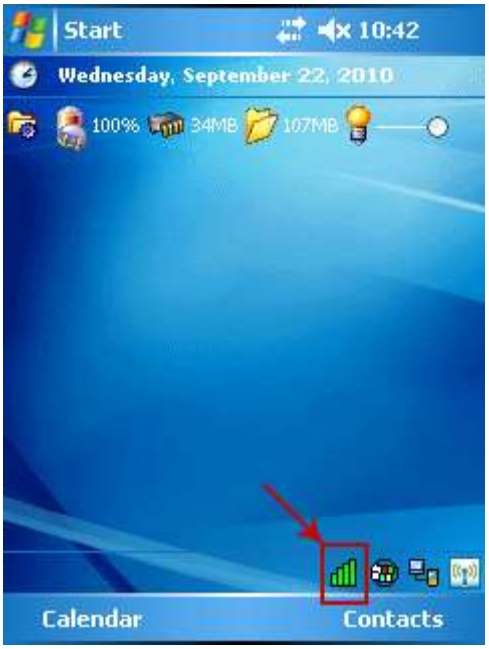


8. Press **Commit.** Go to **Main** tab to select your saved profile.

9. Select your profile at **Active Profile**

Microsoft Zero Config is not in active when you use SCU

On Windows CE6.0 or WEH6.5, Summit software includes a service that displays an icon in the Windows System Tray. This icon provides a visual status for the Summit radio in the device and it provides access to the SCU application.



Note: Tap the icon to launch the SCU application.

The service is active and displays an icon in the System Tray only when all of the following conditions are met:

- A Summit radio is installed in the device or inserted in an external slot in the device.
- The device is active.
- Windows Zero Config (WZC) is not active.
- The SCU Tray Icon global setting is On (the default setting).

When the service is active, it queries the radio every three seconds for connection status. Based on the radio's response to the query, the service displays one of the following icons:

Table: SCU Tray Icons

	The radio is not associated/authenticated to an AP.
	The signal strength (RSSI) for the current AP (to which the radio is associated) is -90 dBm or weaker, which means that a Summit 802.11b/g radio will operate at 802.11b data rates only.
	The RSSI for the current AP is stronger than -90 dBm but not stronger than -70 dBm, which means that a Summit radio will operate at 802.11g or 802.11a data rates that are less than 54 Mbps
	The RSSI for the current AP is stronger than -70 dBm but not stronger than -50 dBm, which means that a Summit radio should operate consistently at 54 Mbps
	The RSSI for the current AP is stronger than -50 dBm.

On most CE devices, the System Tray icon is not visible while SCU is running, but the service remains active.

Remote Desktop Connection

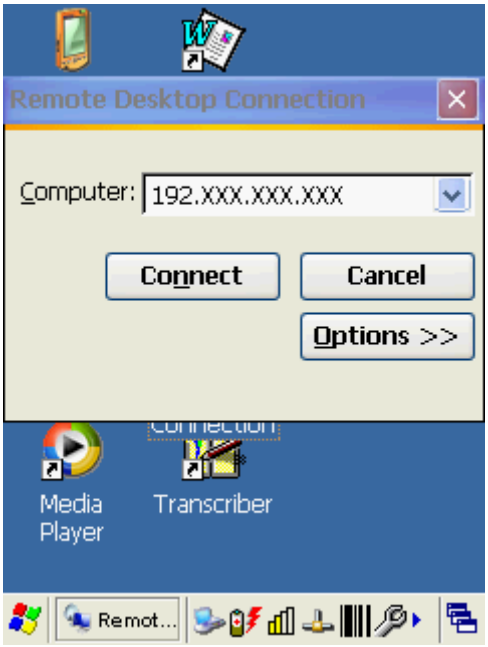
Caution

Make sure your device has been connected to your network

Windows CE6.0

1. Click **Remote Desktop Connection** on idle screen

2. Input your IP address of your server computer, then click **Options>>**



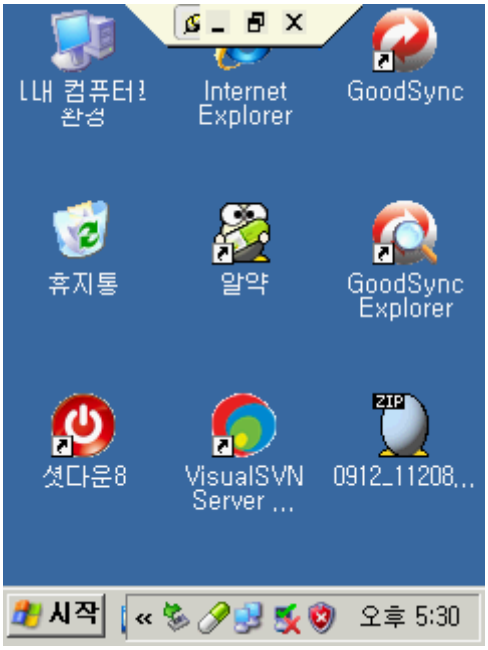
3. Select **Local Resources** tab. and select **On the local computer** at **Keyboard** menu. Then press ENT key.

Caution

Enter key must be used in PDA keypad

4. Input your credentials to connect the local computer, then click **OK**

5. Your device will be connected to the local computer



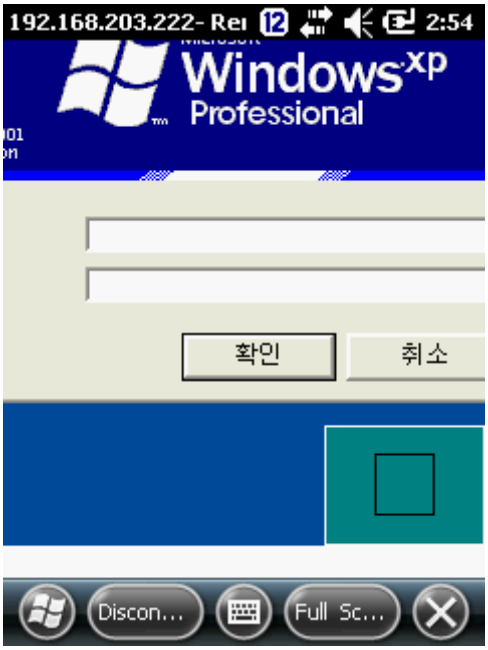
WEH6.5

1. Click **Start** , scroll down screen and click **Remote Desktop Mobile**

2. Input your local computer information

Caution

In case you don't input necessary information, you will see below log in screen to require information.



3. Your local screen will be displayed at the device

GPRS Connection

Before you programming GPRS, you may need following 2 files.

- cmsample.zip : Reference project to make sample
- ConnectionManager_Sample_CSharp.zip: A sample referred from above file

Please check with your regional sales for the files.

Caution

Before use the program,

- ✓ Beside the phone modem, turn off all your wireless radios
- ✓ Disconnect Active Sync with PC

Setting APN (Access Point Name)

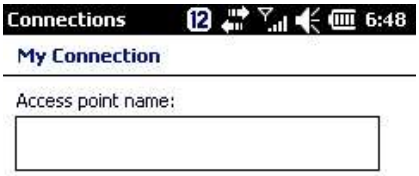
1. Select Phone icon at **Icon Bar**

2. Click **Settings**

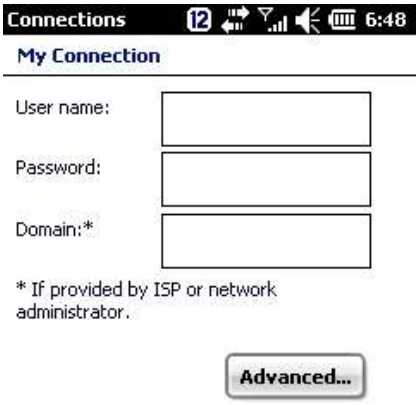
3. Click "**Add a new modem connection**"

4. Set your name at **Enter a name for the connection.** Select **Cellular Line (GPRS).** Then press **Next**

5. Check APN address with your Telecom operator to fill in Access point name. Click **Next**

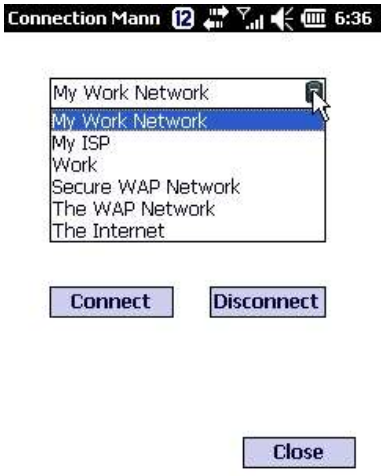


6. Click **Finish**

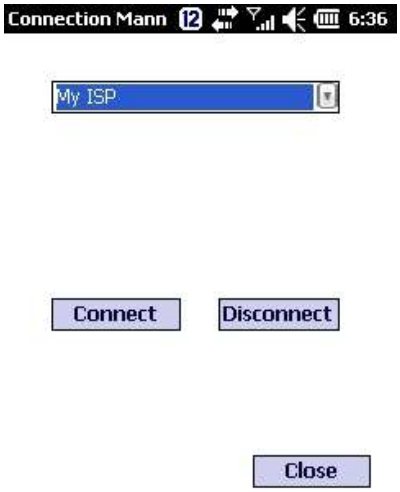


Using Connection Manager Sample

1. Select **MY ISP** at combo box

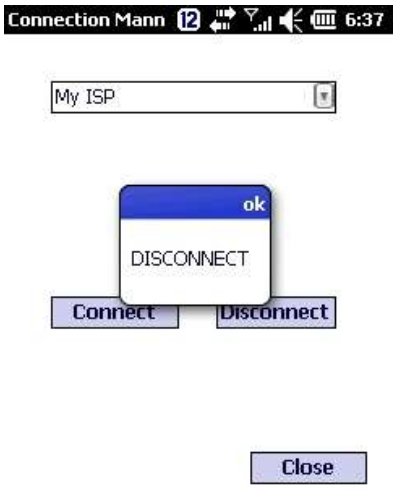


2. Select **Connect**



3. If GPRS is connecting properly, you will see the screen as below

4. If you want to disconnect GPRS, press **Disconnect** button



Barcode Tray

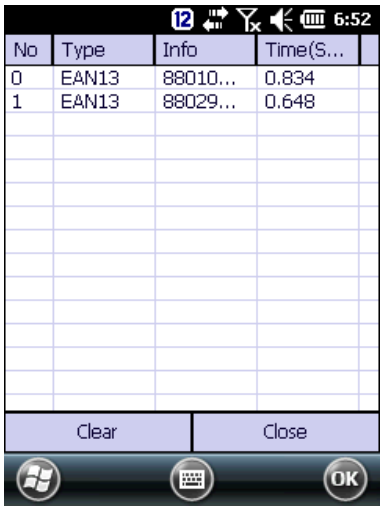
1D Barcode

Image	Menu lists	Details
	Scan Detail	View to detailed barcodes
	Barcode Setup	Setting by barcode types
	Scan Option	Scanning setting
	INFO	Barcode Tray version information
	End	Closing barcode tray program

Scan Detail

It is test function barcode scanning is operating properly. It shows;

- Type: Type of barcode
- Info: Contents in barcode
- Time(Sec): Time to scanning

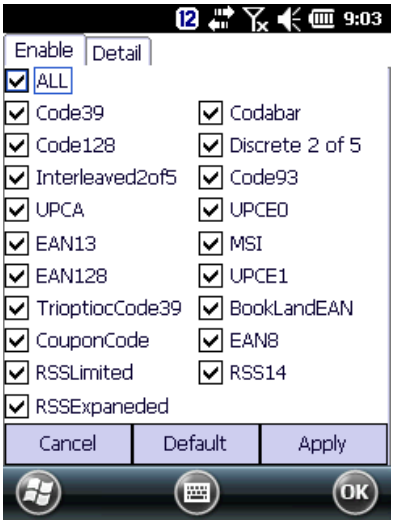


Barcode Setup (Enabling tab)

Setting to able, or disable bar type to read barcode, or factory default barcode tray

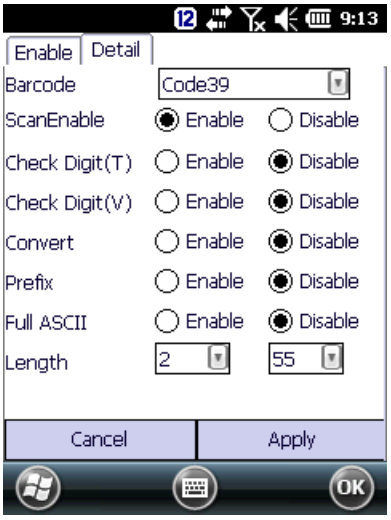
Enabling barcode types on Factory default

- Code39, Code128, Interleaved2of5, UPCA, UPCE0, EAN13, EAN128, EAN8



Barcode Setup (Detailed tab)

Setting option by barcode types such as length, change, or check sum



Scan Option (Option tab)

Setting Time out, Prefix/ Suffix, Transfer Method

Timeout: Setting barcode beam lighting interval per pressing a scanning button

TransMethod: Barcode value transfer method.

- Keyboard: virtual key typing effect when input barcode value. It delivers 1 character by 1 character
- Clipboard: delivery all barcode value at 1 time like copy and paste effect.

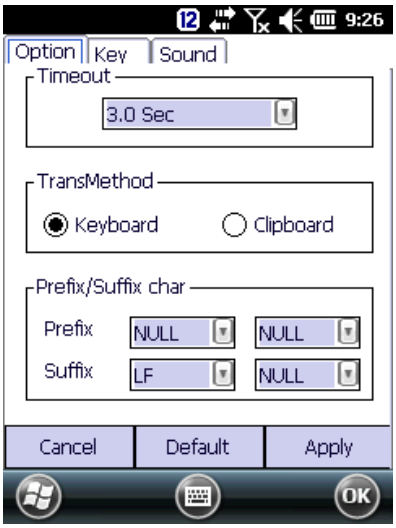
Prefix/ Suffix: additional ASCI code add function from original barcode value. You can set 2 additional value in front of original barcode value (Prefix), or after (Suffix)

Please refer ASCII code for detailed information. (http://www.asciitable.com/)

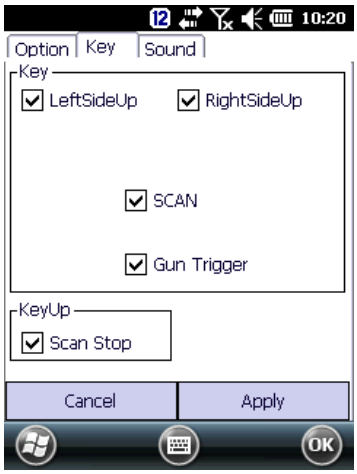
- Clipboard is not supporting Prefix, or suffix option.

DS3 Barcode Tray Default Value

Time out: 3.0S, TransMethod: Keyboard, Prefix 1: Null (0X00), Prefix 2: Null (0X00), Suffix 1: LF (0X0A), Suffix 2: Null (0X00)



Scan Option (Key tab)



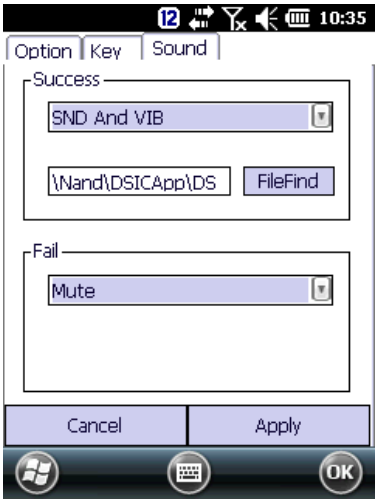
Scan Stop: When scan button getting up after pressing the button, barcode beam is out.

Un-checking Scan Stop: Scanner beam out after user set time out

Scan Option (Sound tab)

Setting notification when scan success or fail.

FileFind: setting user proprietary scanning sound



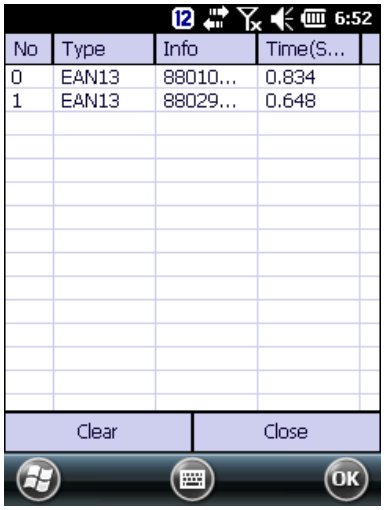
2D Imager Barcode

Image	Memu lists	Details
	Scan Detail	View to detailed barcodes
	Barcode Setup	Setting by barcode types
	Scan Option	Scanning setting
	Image Capture	Imaging Capture
	INFO	Barcode Tray version information
	End	Closing barcode tray program

Scan Detail

It is test function barcode scanning is operating properly. It shows;

- Type: Type of barcode
- Info: Contents in barcode
- Time(Sec): Time to scanning



Barcode Setup (Enabling tab)

Setting to able, or disable bar type to read barcode, or factory default barcode tray

Special: Setting for non barcode types such as OCR

Factory Default Barcode Types

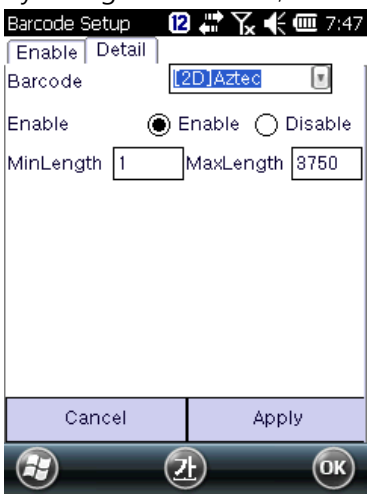
1D : ChinaPost, Codabar, Code39, CODE93, Code128, CouponCode, EAN13, IATA25, INT25, Mx25, PLESSEY, Posicode, Strt25, Telepen, UPCA

2D : AusPost, Aztec, Code16k, Code49, IDTag, KoreaPost, MicroPDF, PDF417, QR, USPS4CB

Barcode Setup (Detail tab)

Setting option by barcode types such as length, change, or check sum

Caution: Barcode option change may change result value, or barcode type in some case



Scan Option (Option tab)

Setting Time out, Prefix/ Suffix, Transfer Method

DS3 Barcode Tray Default Value

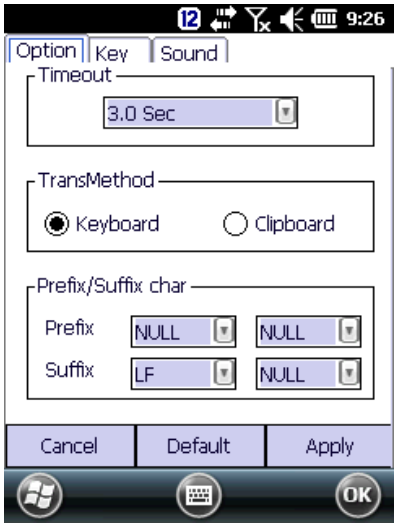
Time out: 3.0S, TransMethod: Keyboard, Prefix 1: Null (0X00), Prefix 2: Null (0X00), Suffix 1: LF (0X0A), Suffix 2: Null (0X00)

Timeout: Setting barcode beam lighting interval per pressing a scanning button

TransMethod: Barcode value transfer method.

- Keyboard: virtual key typing effect when input barcode value. It delivers 1 character by 1 character
- Clipboard: delivery all barcode value at 1 time like copy and paste effect.

Prefix/ Suffix: additional ASCII code add function from original barcode value. You can set 2 additional **char** in front of original barcode value (Prefix), or after (Suffix)



Caution

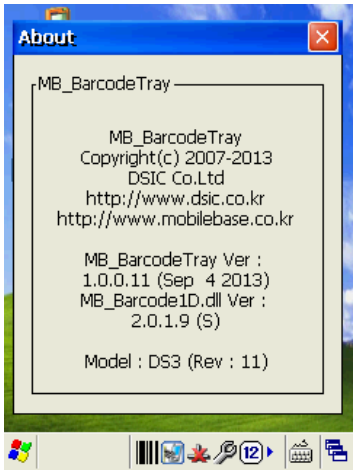
Transmethod **"Clipboard"** is not supporting Prefix, or suffix option.

Required Prefix/ Suffix enabling application version from

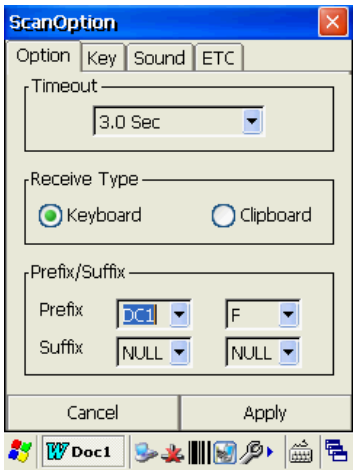
OS	Windows CE		Windows Mobile	
Scanner Type	1D	2D	1D	2D
Tray Version	1.0.0.11		3.0.2.5	
DLL version	2.0.1.9	2.0.0.19	3.0.2.5	3.0.0.14

Example) Applying "Ctrl+F" in prefix

1. Check your Barcode Tray and Scanner DLL is higher than **Required Prefix/ Suffix enabling application version described above**



2. Select "DC1" at 1st Char, and "F" at 2nd Char in Prefix



3. ASCII Table

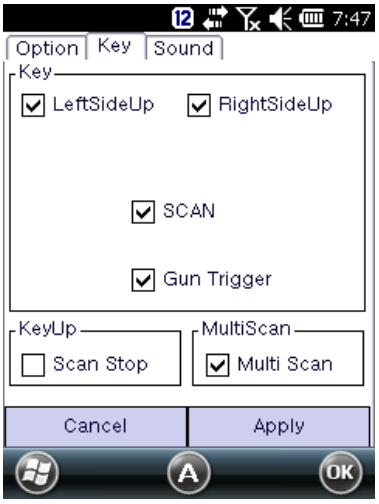
DEC	HEX	OCT	Char	HTML Number	Description
0	0	000	NUL	&#000;	Null char
1	1	001	SOH	&#001;	Start of Heading
2	2	002	STX	&#002;	Start of Text
3	3	003	ETX	&#003;	End of Text
4	4	004	EOT	&#004;	End of Transmission
5	5	005	ENQ	&#005;	Enquiry
6	6	006	ACK	&#006;	Acknowledgment
7	7	007	BEL	&#007;	Bell
8	8	010	BS	&#008;	Back Space
9	9	011	HT		Horizontal Tab
10	0A	012	LF
Line Feed
11	0B	013	VT	&#011;	Vertical Tab
12	0C	014	FF		Form Feed
13	0D	015	CR
Carriage Return

14	0E	016	SO	&#014;	Shift Out / X-On
15	0F	017	SI	&#015;	Shift In / X-Off
16	10	020	DLE	&#016;	Data Line Escape, Shift
17	11	021	DC1	&#017;	Device Control 1 (oft. XON), Control
18	12	022	DC2	&#018;	Device Control 2, VK_MENU, ALT
19	13	023	DC3	&#019;	Device Control 3 (oft. XOFF), VK_PAUSE
20	14	024	DC4	&#020;	Device Control 4, VK_CAPITAL
21	15	025	NAK	&#021;	Negative Acknowledgement
22	16	026	SYN	&#022;	Synchronous Idle
23	17	027	ETB	&#023;	End of Transmit Block
24	18	030	CAN	&#024;	Cancel
25	19	031	EM	&#025;	End of Medium
26	1A	032	SUB	&#026;	Substitute
27	1B	033	ESC	&#027;	Escape
28	1C	034	FS	&#028;	File Separator
29	1D	035	GS	&#029;	Group Separator
30	1E	036	RS	&#030;	Record Separator
31	1F	037	US	&#031;	Unit Separator
32	20	040			Space
33	21	041	!	!	Exclamation mark
34	22	042	"	"	Double quotes (or speech marks)
35	23	043	#	#	Number
36	24	044	$	$	Dollar
37	25	045	%	%	Procenttecken
38	26	046	&	&	Ampersand
39	27	047	'	'	Single quote
40	28	050	(	(	Open parenthesis (or open bracket)
41	29	051	)	)	Close parenthesis (or close bracket)
42	2A	052	*	*	Asterisk
43	2B	053	+	+	Plus
44	2C	054	,	,	Comma
45	2D	055	-	-	Hyphen
46	2E	056	.	.	Period, dot or full stop
47	2F	057	/	/	Slash or divide
48	30	060	0	0	Zero
49	31	061	1	1	One
50	32	062	2	2	Two
51	33	063	3	3	Three
52	34	064	4	4	Four

53	35	065	5	5	Five
54	36	066	6	6	Six
55	37	067	7	7	Seven
56	38	070	8	8	Eight
57	39	071	9	9	Nine
58	3A	072	:	:	Colon
59	3B	073	;	;	Semicolon
60	3C	074	<	<	Less than (or open angled bracket)
61	3D	075	=	=	Equals
62	3E	076	>	>	Greater than (or close angled bracket)
63	3F	077	?	?	Question mark
64	40	100	@	@	At symbol
65	41	101	A	A	Uppercase A
66	42	102	B	B	Uppercase B
67	43	103	C	C	Uppercase C
68	44	104	D	D	Uppercase D
69	45	105	E	E	Uppercase E
70	46	106	F	F	Uppercase F
71	47	107	G	G	Uppercase G
72	48	110	H	H	Uppercase H
73	49	111	I	I	Uppercase I
74	4A	112	J	J	Uppercase J
75	4B	113	K	K	Uppercase K
76	4C	114	L	L	Uppercase L
77	4D	115	M	M	Uppercase M
78	4E	116	N	N	Uppercase N
79	4F	117	O	O	Uppercase O
80	50	120	P	P	Uppercase P
81	51	121	Q	Q	Uppercase Q
82	52	122	R	R	Uppercase R
83	53	123	S	S	Uppercase S
84	54	124	T	T	Uppercase T
85	55	125	U	U	Uppercase U
86	56	126	V	V	Uppercase V
87	57	127	W	W	Uppercase W
88	58	130	X	X	Uppercase X
89	59	131	Y	Y	Uppercase Y
90	5A	132	Z	Z	Uppercase Z
91	5B	133	[	[	Opening bracket

92	5C	134	₩	\	Backslash
93	5D	135	]	]	Closing bracket
94	5E	136	^	^	Caret - circumflex
95	5F	137	_	_	Underscore
96	60	140	`	`	Grave accent
97	61	141	a	a	Lowercase a
98	62	142	b	b	Lowercase b
99	63	143	c	c	Lowercase c
100	64	144	d	d	Lowercase d
101	65	145	e	e	Lowercase e
102	66	146	f	f	Lowercase f
103	67	147	g	g	Lowercase g
104	68	150	h	h	Lowercase h
105	69	151	i	i	Lowercase i
106	6A	152	j	j	Lowercase j
107	6B	153	k	k	Lowercase k
108	6C	154	l	l	Lowercase l
109	6D	155	m	m	Lowercase m
110	6E	156	n	n	Lowercase n
111	6F	157	o	o	Lowercase o
112	70	160	p	p	Lowercase p
113	71	161	q	q	Lowercase q
114	72	162	r	r	Lowercase r
115	73	163	s	s	Lowercase s
116	74	164	t	t	Lowercase t
117	75	165	u	u	Lowercase u
118	76	166	v	v	Lowercase v
119	77	167	w	w	Lowercase w
120	78	170	x	x	Lowercase x
121	79	171	y	y	Lowercase y
122	7A	172	z	z	Lowercase z
123	7B	173	{	{	Opening brace
124	7C	174	|			Vertical bar
125	7D	175	}	}	Closing brace
126	7E	176	~	~	Equivalency sign - tilde
127	7F	177	DEL	&#127;	Delete

Scan Option (Key tab)

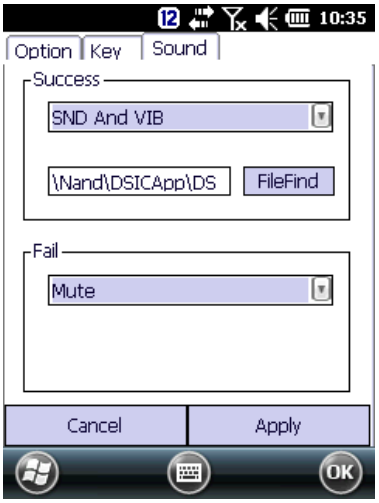


Scan Stop: When scan button getting up after pressing the button, barcode beam is out.
Un-checking Scan Stop: Scanner beam out after user set time out

Multi Scan: This is special feature at 2D barcode function. It is enabling to read continuous barcode scanning. Duplicated barcode in buffer range may skip. Buffer ranges in 2D is about 8~10 barcodes.

Scan Option (Sound tab)

Setting notification when scan success or fail.
FileFind: setting user proprietary scanning sound



HF RFID (13.56Mhz)

RFID Summary

DS5 and DS5 wide supporting 13.56Mhz HF RFID at WEH 6.5, and Windows CE6.0. Typical reading distances are 3~9cm depends on tag types and sizes.

Development Tools

Windows Mobile 6.5: Microsoft Visual Studio 2008 C#, VS2005 C++

Supporting HF RFID tags

Contents	Description
Standards	ISO 14443A, ISO 14443B, ISO 15693, ISO 18000-3, NFC enabled, ICODE
Tag-IC	MIFARE Standard, MIFARE 4K, MIFARE Plus, MIFARE Pro, MIFARE Ultralight, MIFARE DESFire, MIFARE DESFire EV1, MIFARE SmartMX, I-CODE SLI (SL2 ICS 20), I-CODE EPC (SL2 ICS 10), I-CODE UID, (SL2 ICS11), I-CODE, NFC (Reader to Tag Mode) SLE 55Rxx, SRF55VxxP +S, SLE 66CL160S, SLE 66CLX320P, SR176, SRIX 4K, LRI 64, LRI 512,EM4135, KSW Temp Sens' Tag-it™ HF-I Pro, Jewel Tag, Sharp B, ISO 14443A Tags, ISO 14443B Tags, ISO 15693B Tags, ISO 18000-3 Tags, Master Card PayPass, and Visa paywave compliant tags
Reading Distances	Up to 9cm depending on tag and its size
Approvals/ Compliance	RoHS compliant, EMVCo 2.01
MTBF (RFID Core)	3,000,000h

Related Source & Files

Folder	Files	Description
Dlls\	CFReader.dll	HID RF Reader Control Dll
	DS_CommonAPI.dll	DS3 Common API Dll
	[\Net] HidGlobal.MultiIso.CFReader.dll	HID RF Reader Control .Net Version Dll
Include\	DS_CommonAPIDll.h	HID RF Reader Control Header File
	ReaderDll.h	DS3 Common API Header File
Lib\	CFReader.lib	HID RF Reader Control Library
	DS_CommonAPI.lib	DS3 Common API Library
Samples\	[\NET\CSharp] HID_Demo	VS 2008 C# Sample Project
	[VC\ MFC\] CFReaderDll_Demo_MFC	VS 2005 VC++ MFC Sample Project
	[\VC\ WIN32\] CFreader_demo_win32	VS 2005 VC++ Win32 Sample Project
Utilities\	[\CFReaderUtility] CFReaderUtility.exe CFReader.dll DS_CommonAPI.dll DS_RFIDPower.exe	HID RF Reader Utility & RF Power Control App

RFID Control

- Port and Baud Rate by OS

Windows CE6.0		**WEH 6.5**	
Port	COM9	Port	COM3
Baud Rate	9600	Baud Rate	9600

- RFID Control DLL

DLL Types	**Description**
DS_CommonAPI.DLL	· DSIC DS Common API Library · DSAPISetRFPower · DSAPIGetRFPower · DSAPISetVibrator · DSAPIKeyReMapping · DSAPIKeyMapAllRecovery
CFReader.DLL	·HID RF Reader API Library ·RDR_OpenReader ·RDR_CloseReader ·RDR_OpenComm ·RDR_OpenSingle ·RDR_CloseComm ·RDR_SendCommand ·RDR_SetReaderConfig

- RFID Control Flow